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OM nucleic - nucleic search, using sw model

Run on: November 1, 2002, 06:19:23 ; Search time 56 Seconds  
(without alignments)  
7343.813 Million cell updates/sec

Title: US-09-910-186a-7  
Perfect score: 1341  
Sequence: 1 gaattcagcatgcccacaa.....ggaccgaatgaagaattc 1341

Scoring table: IDENTITY\_NUC  
Gapop 10.0, Gapext 1.0

Searched: 441362 seqs, 15338381 residues

Total number of hits satisfying chosen parameters: 882724

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : Issued Patents.NA.\*  
1: /cgn2-6/ptodata/1/ina/5A.COMB.seq.\*  
2: /cgn2-6/ptodata/1/ina/5B.COMB.seq.\*  
3: /cgn2-6/ptodata/1/ina/6A.COMB.seq.\*  
4: /cgn2-6/ptodata/1/ina/6B.COMB.seq.\*  
5: /cgn2-6/ptodata/1/ina/PCOTUS.COMB.seq.\*  
6: /cgn2-6/ptodata/1/ina/backfile1.seq.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	522.4	39.0	3509	4	US-09-255-829-19
2	263	19.6	1330	1	US-08-480-604A-22
3	263	19.6	1330	4	US-08-405-46A-22
4	263	19.6	1330	4	US-08-915-136-22
5	263	19.6	1402	1	US-08-480-604A-25
6	263	19.6	1402	2	US-08-405-46A-25
7	263	19.6	1402	4	US-08-915-136-25
8	131.4	9.8	1359	1	US-07-618-312A-3
9	131.4	9.8	1359	1	US-08-280-228-3
10	123	9.2	3891	2	US-08-480-604A-27
11	123	9.2	3891	2	US-08-405-46A-27
12	123	9.2	3891	4	US-08-915-136-27
13	70.6	5.3	5163	3	US-08-700-651-1
14	70.6	5.3	5163	3	US-08-928-361B-4
15	70.6	5.3	5163	3	US-08-928-361B-2
16	70.6	5.3	5163	3	US-08-928-361B-3
17	64	4.8	7341	3	US-08-928-361B-2
18	64	4.8	7341	3	US-08-928-361B-1
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21	55.4	4.1	1359	1	US-08-280-228-1
22	55.4	4.1	1359	1	US-08-668-381A-6
23	43.4	3.2	1430	1	US-08-276-452A-25
24	43.4	3.2	1430	2	US-08-798-744-25
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27	38.4	2.9	198	5	PCT-US95-10668-3

28	38.4	2.9	198	5	PCT-US95-10668-4	Sequence 4, Appli
29	37.6	2.8	2574	4	US-09-255-829-28	Sequence 28, Appli
30	36.8	2.7	9046	1	US-08-227-536-1	Sequence 1, Appli
31	36.8	2.7	9046	5	PCT-US95-04682-1	Sequence 1, Appli
32	36.6	2.7	6826	4	US-09-024-0208-8	Sequence 8, Appli
33	36.6	2.7	6826	4	US-09-425-043-8	Sequence 8, Appli
34	36.4	2.7	8147	4	US-09-514-247A-9	Sequence 9, Appli
35	36	2.7	1149	4	US-09-422-487-6	Sequence 6, Appli
36	36	2.7	1149	4	US-09-378-088A-128	Sequence 128, App
37	36	2.7	18596	4	US-09-318-448-11	Sequence 11, Appli
38	35.6	2.7	3378	1	US-07-972-791-1	Sequence 1, Appli
39	35.2	2.6	198	5	PCT-US95-10668-1	Sequence 1, Appli
40	35.2	2.6	198	5	PCT-US95-10668-2	Sequence 2, Appli
41	35	2.6	4281	4	US-09-351-200-1	Sequence 1, Appli
42	35	2.6	5977	3	US-09-024-0208-1	Sequence 1, Appli
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44	35	2.6	6007	3	US-09-024-0208-2	Sequence 2, Appli
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## ALIGNMENTS

RESULT 1  
US-09-255-829-19  
Sequence 19, Application US/09255829  
Patent No. 6461617  
GENERAL INFORMATION:  
APPLICANT: Shore, Clifford Charles  
APPLICANT: Quinn, Conrad Padraig  
APPLICANT: Foster, Keith Alan  
TITLE OF INVENTION: Recombinant Toxin Fragments  
NUMBER OF SEQUENCES: 29  
CORRESPONDENCE ADDRESS:  
ADDRESSER: STERN, KESSLER, GOLDSTEIN, & FOX P.L.L.C.  
STREET: 1100 NEW YORK AVENUE, NW, SUITE 600  
CITY: WASHINGTON  
STATE: DC  
COUNTRY: USA  
ZIP: 20005-3934  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.30 (EPO)  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/255, 829  
FILING DATE: 23-FEB-1999  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: PCT/GB97/02273  
FILING DATE: 22-AUG-1997  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/782, 893  
FILING DATE: 27-DEC-1996  
ATTORNEY/AGENT INFORMATION:  
NAME: BSMOND, ROBERT W.  
REGISTRATION NUMBER: 32, 893  
REFERENCE/DOCKET NUMBER: 1581.0130002  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 202-371-2540  
TELEFAX: 202-371-2540  
INFORMATION FOR SEQ ID NO: 19:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 3509 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: double  
TOPOLOGY: linear  
MOLECULE TYPE: DNA (genomic)  
FEATURE:  
NAME/KEY: CDS  
LOCATION: 1..3509  
US-09-255-829-19

Query Match 39.0%, Score 522.4; DB 4; Length 3509;  
 Best Local Similarity 71.7%; Pred. No. 4.3e-141;  
 Matches 685; Conservative 0; Mismatches 271; Indels 0; Gaps 0;

10 ATGCCAAGATATACATCCGAATCCGTAATATCATCCGACCGCTTACAAA 69  
 2554 ATGTTAAT 2613  
 70 GACACAAATCTGATGATCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 129  
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 130 GAAGTAT 189  
 2674 GAGCTTAT 2733  
 190 ACTGAGAT 249  
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 250 ATTCGAT 309  
 2794 ATAGAT 2853  
 310 AT 369  
 2854 AT 2913  
 370 ATTCGAT 429  
 2914 ATATGAT 2973  
 430 CGTGAAGAT 489  
 2974 AGGAGAT 3033  
 490 AACAT 549  
 3034 AAT 3093  
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 3154 CAGTAT 3213  
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 790 CTGAGAGAT 849  
 3334 CTGAGAGAT 3393  
 850 AAT 909  
 3394 AAT 3453  
 910 AAT 965  
 3454 AAT 3509

RESULT 2  
 ; US-08-480-604A-22  
 ; Sequence 22, Application US/08480604A  
 ; Patent No. 5736139

GENERAL INFORMATION:  
 APPLICANT: KINK, JOHN A.  
 APPLICANT: THALLEY, BRUCE S.  
 APPLICANT: PADHYE, NISHA V.  
 APPLICANT: FIRCA, JOSEPH R.  
 APPLICANT: STAFFORD, DOUGLAS C.  
 TITLE OF INVENTION: VACCINE AND ANTITOXIN FOR TREATMENT AND PREVENTION OF C. DIFFICILE DISEASE  
 NUMBER OF SEQUENCES: 32  
 CORRESPONDENCE ADDRESS:  
 ADDRESSEE: MEDLEN & CARROLL, LLP  
 STREET: 220 MONTGOMERY STREET, SUITE 2200  
 CITY: SAN FRANCISCO  
 STATE: CALIFORNIA  
 COUNTRY: UNITED STATES OF AMERICA  
 ZIP: 94104  
 COMPUTER READABLE FORM:  
 MEDIUM TYPE: Floppy disk  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: Patent Release #1.0, Version #1.30  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/08/480,604A  
 FILING DATE: 07-JUN-1995  
 CLASSIFICATION: 424  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 08/422,711  
 FILING DATE: 14-APR-1995  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 08/405,496  
 FILING DATE: 16-MAR-1995  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 08/329,154  
 FILING DATE: 25-OCT-1994  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 08/161,907  
 FILING DATE: 02-DEC-1993  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 07/985,321  
 FILING DATE: 04-DEC-1992  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 07/429,791  
 FILING DATE: 31-OCT-1989  
 ATTORNEY/AGENT INFORMATION:  
 NAME: INGOLTA, DIANE E.  
 REGISTRATION NUMBER: 40,027  
 REFERENCE/DOCKET NUMBER: OPND-01763  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: (415) 705-8410  
 TELEFAX: (415) 397-8338  
 INFORMATION FOR SEQ ID NO: 22:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 1330 base pairs  
 TYPE: nucleic acid  
 STRANDEDNESS: double  
 TOPOLOGY: linear  
 MOLECULE TYPE: DNA (genomic)  
 FEATURE:  
 NAME/KEY: CDS  
 LOCATION: 1..1314  
 US-08-480-604A-22  
 Query Match 19.6%; Score 263; DB 1; Length 1330;  
 Best Local Similarity 53.9%; Pred. No. 2.5e-66;  
 Matches 639; Conservative 0; Mismatches 525; Indels 21; Gaps 4;

15 CAACAATATACATCCGAATCCGTAATATCATCCGACCGCTTACAAA 74  
 24 CACTGAATACATCAAGAACATATATATATATATATATATATATATATAT 83  
 75 CAATCTGATGATCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 129  
 84 TCACCTGATGACCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 143

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 144 CGATCCGATGACAGACAGGTTCAACTGACCTCTCCGCTTAAGATCCGCT 203  
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 435 GATGATGACAGACAGGTTCAACTGACCTCTCCGCTTAAGATCCGCT 494  
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 546 CATCCGATGACAGACAGGTTCAACTGACCTCTCCGCTTAAGATCCGCT 605  
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 795 TACCCGATGACAGACAGGTTCAACTGACCTCTCCGCTTAAGATCCGCT 854  
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 915 TACCCGATGACAGACAGGTTCAACTGACCTCTCCGCTTAAGATCCGCT 974  
 966 TACCCGATGACAGACAGGTTCAACTGACCTCTCCGCTTAAGATCCGCT 1025  
 975 TACCCGATGACAGACAGGTTCAACTGACCTCTCCGCTTAAGATCCGCT 1034  
 1026 TACCCGATGACAGACAGGTTCAACTGACCTCTCCGCTTAAGATCCGCT 1085  
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 1146 TACCCGATGACAGACAGGTTCAACTGACCTCTCCGCTTAAGATCCGCT 1190  
 1152 TACCCGATGACAGACAGGTTCAACTGACCTCTCCGCTTAAGATCCGCT 1196

RESULT 3  
 US-08-405-496A-22  
 ; Sequence 22, Application US/08405496A  
 ; Patent No. 5919665  
 ; GENERAL INFORMATION:  
 ; APPLICANT: WILLIAMS, JAMES A.  
 ; TITLE OF INVENTION: VACCINE FOR CLOSTRIDIUM BOTULINUM  
 ; NUMBER OF SEQUENCES: 30  
 ; CORRESPONDENCE ADDRESS:  
 ; ADDRESSEE: MEDLEN & CARROLL, LLP  
 ; STREET: 220 MONTGOMERY STREET, SUITE 2200  
 ; CITY: SAN FRANCISCO  
 ; STATE: CALIFORNIA  
 ; COUNTRY: USA  
 ; ZIP: 94104  
 ; COMPUTER READABLE FORM:  
 ; MEDIUM TYPE: Floppy disk  
 ; COMPUTER: IBM PC compatible  
 ; OPERATING SYSTEM: PC-DOS/MS-DOS  
 ; SOFTWARE: Patent in Release #1.0, Version #1.30  
 ; CURRENT APPLICATION DATA:  
 ; APPLICATION NUMBER: US/08/405,496A  
 ; FILING DATE: 16-MAR-1995  
 ; CLASSIFICATION: 424  
 ; PRIOR APPLICATION DATA:  
 ; APPLICATION NUMBER: US 08/329,154  
 ; FILING DATE: 25-OCT-1994  
 ; PRIOR APPLICATION DATA:  
 ; APPLICATION NUMBER: US 08/161,907  
 ; FILING DATE: 02-DEC-1993  
 ; PRIOR APPLICATION DATA:  
 ; APPLICATION NUMBER: US 07/985,321  
 ; FILING DATE: 04-DEC-1992  
 ; PRIOR APPLICATION DATA:  
 ; APPLICATION NUMBER: US 07/429,791  
 ; FILING DATE: 31-OCT-1989  
 ; ATTORNEY/AGENT INFORMATION:  
 ; NAME: INGOLIA, DIANE E.  
 ; REGISTRATION NUMBER: 40,027  
 ; REFERENCE/DOCKET NUMBER: OPD-01308  
 ; TELECOMMUNICATION INFORMATION:  
 ; TELEPHONE: (415) 705-8410  
 ; TELEFAX: (415) 397-8338  
 ; INFORMATION FOR SEQ ID NO: 22:  
 ; SEQUENCE CHARACTERISTICS:  
 ; LENGTH: 1330 base pairs  
 ; TYPE: nucleic acid  
 ; STRANDEDNESS: double  
 ; TOPOLOGY: linear  
 ; MOLECULE TYPE: DNA (genomic)  
 ; FEATURE:  
 ; NAME/KEY: CDS  
 ; LOCATION: 1..1314  
 ; US-08-405-496A-22  
 Query Match 19.6%; Score 263; DB 2; Length 1330;  
 Best Local Similarity 53.9%; Pred. No. 2.5e-66;  
 Matches 639; Conservative 0; Mismatches 525; Indels 21; Gaps 4;  
 15 CAACAATACATTCGGAATCTGGAACATATCATCTGACACCTGCTTAAGACAA 74  
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 130 -GAAGTATGACAGACAGGTTCAACTGACCTCTCCGCTTAAGATCCGCT 188  
 144 CGATCCGATGACAGACAGGTTCAACTGACCTCTCCGCTTAAGATCCGCT 203

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 204 TATCTGAGAGATCTCTCTGATGACACTATATGACGAAATCTCCACTCTCTG 263  
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 369 CATCTGATGAGATGAGATGAGATGAGATGAGATGAGATGAGATGAGAT 428  
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 546 CATCTGATGAGATGAGATGAGATGAGATGAGATGAGATGAGATGAGAT 605  
 555 TCGTGAAGATCTCTGATGAGATGAGATGAGATGAGATGAGATGAGAT 614  
 606 TACCGATGAGATGAGATGAGATGAGATGAGATGAGATGAGATGAGAT 665  
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 666 TATGAGATGAGATGAGATGAGATGAGATGAGATGAGATGAGATGAGAT 725  
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 726 TCGTGAAGATCTCTGATGAGATGAGATGAGATGAGATGAGATGAGAT 785  
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 855 TATGATGAGATGAGATGAGATGAGATGAGATGAGATGAGATGAGAT 914  
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 966 CTCTGATGAGATGAGATGAGATGAGATGAGATGAGATGAGATGAGAT 1025  
 975 TCGTGAAGATCTCTGATGAGATGAGATGAGATGAGATGAGATGAGAT 1034  
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 1035 TATGATGAGATGAGATGAGATGAGATGAGATGAGATGAGATGAGAT 1094  
 1086 CATGATGAGATGAGATGAGATGAGATGAGATGAGATGAGATGAGAT 1145  
 1095 GATGATGAGATGAGATGAGATGAGATGAGATGAGATGAGATGAGAT 1151  
 1146 ATCTGATGAGATGAGATGAGATGAGATGAGATGAGATGAGATGAGAT 1190  
 1152 CATGATGAGATGAGATGAGATGAGATGAGATGAGATGAGATGAGAT 1196

## RESULT 4

1 US-08-915-136-22  
 2 Sequence 22, Application US/08915136  
 3 Patent No. 6290960

GENERAL INFORMATION:  
 APPLICANT: KINK, JOHN A.  
 APPLICANT: THALLEY, BRUCE S.  
 APPLICANT: PADHYE, NISHA V.  
 APPLICANT: FIRCA, JOSEPH R.  
 APPLICANT: STAFFORD, DOUGLAS C.  
 TITLE OF INVENTION: VACCINE AND ANTITOXIN FOR TREATMENT AND PREVENTION OF C. DIFFICILE DISEASE  
 NUMBER OF SEQUENCES: 32  
 CORRESPONDENCE ADDRESS:  
 ADDRESSEE: MEDLEN & CARROLL, LLP  
 STREET: 220 MONTGOMERY STREET, SUITE 2200  
 CITY: SAN FRANCISCO  
 STATE: CALIFORNIA  
 COUNTRY: UNITED STATES OF AMERICA  
 ZIP: 94104  
 COMPUTER READABLE FORM:  
 MEDIUM TYPE: Floppy disk  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: Patentin Release #1.0, Version #1.30  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/08/915,136  
 FILING DATE:  
 CLASSIFICATION:  
 PRIORITY APPLICATION DATA:  
 APPLICATION NUMBER: 08/480,604  
 FILING DATE:  
 PRIORITY APPLICATION DATA:  
 APPLICATION NUMBER: US 08/405,496  
 FILING DATE: 16-MAR-1995  
 PRIORITY APPLICATION DATA:  
 APPLICATION NUMBER: US 08/329,154  
 FILING DATE: 25-OCT-1994  
 PRIORITY APPLICATION DATA:  
 APPLICATION NUMBER: US 08/161,907  
 FILING DATE: 02-DEC-1993  
 PRIORITY APPLICATION DATA:  
 APPLICATION NUMBER: US 07/985,321  
 FILING DATE: 04-DEC-1992  
 PRIORITY APPLICATION DATA:  
 APPLICATION NUMBER: US 07/429,791  
 FILING DATE: 31-OCT-1989  
 ATTORNEY/AGENT INFORMATION:  
 NAME: INGOLTA, DIANE E.  
 REGISTRATION NUMBER: 40,027  
 REFERENCE/DOCKET NUMBER: OPHD-01763  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: (415) 705-8410  
 TELEFAX: (415) 397-8338  
 INFORMATION FOR SEQ ID NO: 22:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 1330 base pairs  
 TYPE: nucleic acid  
 STRANDEDNESS: double  
 TOPOLOGY: linear  
 MOLECULE TYPE: DNA (genomic)  
 FEATURE:  
 NAME/KEY: CDS  
 LOCATION: 1..1314  
 US-08-915-136-22  
 Query Match 15.6%, Score 263, DB 4, Length 1330;  
 Best Local Similarity 53.9%, Pred. No. 2, 5e-66;  
 Matches 639; Conservative 0; Mismatches 525; Indels 21; Gaps 4;  
 15 CACCAATATCAATTCGGAATCCCTGAACAATATCATCTGAGCTGCTTACAAAGCA 74  
 24 CACTGATATCATCAAGACATCATATCACTCTGAGCTGAGCTGAGCTGAGCTGAG 83  
 75 CAATCTGATGATCTGTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 129  
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QY 130 -GAACGATGACAGAACCAAGTTCAAAGTACCTCTCCGCTAAGTCAAGTCCGCTG 188  
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 QY 189 TACGACGATGACAGAACCAAGTTCAAAGTACCTCTCCGCTAAGTCAAGTCCGCTG 248  
 DB 204 TATCTGACGATGACAGAACCAAGTTCAAAGTACCTCTCCGCTAAGTCAAGTCCGCTG 263  
 QY 249 GATCTGATGACAGAACCAAGTTCAAAGTACCTCTCCGCTAAGTCAAGTCCGCTG 308  
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 DB 375 CATCTGATGACAGAACCAAGTTCAAAGTACCTCTCCGCTAAGTCAAGTCCGCTG 434  
 QY 429 CCGTGAAGACATCTCTGACATCAATCCGCTGCTGCTGCTGCTGCTGCTGCTGCTG 485  
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 QY 546 CATCTGATGACAGAACCAAGTTCAAAGTACCTCTCCGCTAAGTCAAGTCCGCTG 605  
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 DB 735 TCCGCTGATGACAGAACCAAGTTCAAAGTACCTCTCCGCTAAGTCAAGTCCGCTG 794  
 QY 786 CAAAGTGAAGACATCTCTGACATCAATCCGCTGCTGCTGCTGCTGCTGCTGCTGCTG 845  
 DB 795 TACGCTGACATCTCTGACATCAATCCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 854  
 QY 846 CTTCTAAGTGAAGACATCTCTGACATCAATCCGCTGCTGCTGCTGCTGCTGCTGCTGCTG 905  
 DB 855 TATGATGACATCTCTGACATCAATCCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 914  
 QY 906 ATCTAAGTGAAGACATCTCTGACATCAATCCGCTGCTGCTGCTGCTGCTGCTGCTGCTG 965  
 DB 915 GAAATGACGCTCTGCTGACATCAATCCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 974  
 QY 966 CTTCTAAGTGAAGACATCTCTGACATCAATCCGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1025  
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 QY 1026 AGAAAGCTTTCTGCTGCTGACATCAATCCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1085  
 DB 1035 AAGAGCTTTCTGCTGCTGACATCAATCCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1094  
 QY 1086 CAAAGATGACAGAACCAAGTTCAAAGTACCTCTCCGCTAAGTCAAGTCCGCTG 1145  
 DB 1095 GAAATGACGCTCTGCTGACATCAATCCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1151  
 QY 1146 ATCTAGTGAAGACATCTCTGACATCAATCCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1190  
 DB 1152 CAATGATGACATCTCTGACATCAATCCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1196

RESULT 5  
 US-08-480-604A-25  
 : Sequence 25, Application US/08480604A  
 : Patent No. 5736139  
 :  
 : GENERAL INFORMATION:  
 : APPLICANT: KINK, JOHN A.  
 : APPLICANT: THALLEY, BRUCE S.  
 : APPLICANT: PADHYE, NISHA V.  
 : APPLICANT: FIRCA, JOSEPH R.  
 : APPLICANT: STAFFORD, DOUGLAS C.  
 : TITLE OF INVENTION: VACCINE AND ANTITOXIN FOR TREATMENT AND  
 : PREVENTION OF C. DIFFICILE DISEASE  
 : NUMBER OF SEQUENCES: 32  
 : CORRESPONDENCE ADDRESS:  
 : ADDRESSEE: MEDLEN & CARROLL, LLP  
 : STREET: 220 MONTGOMERY STREET, SUITE 2200  
 : CITY: SAN FRANCISCO  
 : STATE: CALIFORNIA  
 : COUNTRY: UNITED STATES OF AMERICA  
 : ZIP: 94104  
 :  
 : COMPUTER READABLE FORM:  
 : MEDIUM TYPE: Floppy disk  
 : COMPUTER: IBM PC compatible  
 : OPERATING SYSTEM: PC-DOS/MS-DOS  
 : SOFTWARE: Patent in Release #1.0, Version #1.30  
 : CURRENT APPLICATION DATA:  
 : APPLICATION NUMBER: US/08/480,604A  
 : FILING DATE: 07-JUN-1995  
 :  
 : CLASSIFICATION: 424  
 : PRIOR APPLICATION DATA:  
 : APPLICATION NUMBER: US 08/422,711  
 : FILING DATE: 14-APR-1995  
 : PRIOR APPLICATION DATA:  
 : APPLICATION NUMBER: US 08/405,496  
 : FILING DATE: 16-MAR-1995  
 : PRIOR APPLICATION DATA:  
 : APPLICATION NUMBER: US 08/329,154  
 : FILING DATE: 25-OCT-1994  
 : PRIOR APPLICATION DATA:  
 : APPLICATION NUMBER: US 08/161,907  
 : FILING DATE: 02-DEC-1993  
 : PRIOR APPLICATION DATA:  
 : APPLICATION NUMBER: US 07/985,321  
 : FILING DATE: 04-DEC-1992  
 : PRIOR APPLICATION DATA:  
 : APPLICATION NUMBER: US 07/429,791  
 : FILING DATE: 31-OCT-1989  
 : ATTORNEY/AGENT INFORMATION:  
 : NAME: INGOLIA, DIANE E.  
 : REGISTRATION NUMBER: 40,027  
 : REFERENCE/DOCKET NUMBER: OPHD-01763  
 : TELECOMMUNICATION INFORMATION:  
 : TELEPHONE: (415) 705-8410  
 : TELEFAX: (415) 397-8338  
 : INFORMATION FOR SEQ ID NO: 25:  
 : SEQUENCE CHARACTERISTICS:  
 : LENGTH: 1402 base pairs  
 : TYPE: nucleic acid  
 : STRANDEDNESS: double  
 : TOPOLOGY: linear  
 : MOLECULE TYPE: DNA (genomic)  
 : FEATURE:  
 : NAME/KEY: CDS  
 : LOCATION: 1..1386  
 :  
 : US-08-480-604A-25  
 :  
 : Query Match 19.6%; Score 263; DB 1; Length 1402;  
 : Best Local Similarity 53.9%; Pred. No. 2.6e-66;  
 : Matches 639; Conservative 0; Mismatches 525; Infels 21; Gaps 4;  
 :  
 : QY 15 CAAAGATGACAGAACCAAGTTCAAAGTACCTCTCCGCTAAGTCAAGTCCGCTG 74



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US-08-915-136-25
: Sequence 25, Application US/08915136
: Patent No. 6230960
:
: GENERAL INFORMATION:
: APPLICANT: KINK, JOHN A.
: APPLICANT: THALEY, BRUCE S.
: APPLICANT: PADHYE, NISHA V.
: APPLICANT: FIRCA, JOSEPH R.
: APPLICANT: STAFFORD, DOUGLAS C.
: TITLE OF INVENTION: VACCINE AND ANTITOXIN FOR TREATMENT AND
: TITLE OF INVENTION: PREVENTION OF C. DIFFICILE DISEASE
: NUMBER OF SEQUENCES: 32
:
: CORRESPONDENCE ADDRESS:
: ADDRESSEE: MEDLEN & CARROLL, LLP
: STREET: 220 MONTGOMERY STREET, SUITE 2200
: CITY: SAN FRANCISCO
: STATE: CALIFORNIA
: COUNTRY: UNITED STATES OF AMERICA
: ZIP: 94104
:
: COMPUTER READABLE FORM:
: MEDIUM TYPE: FLOPPY disk
: COMPUTER: IBM PC compatible
: OPERATING SYSTEM: PC-DOS/MS-DOS
: SOFTWARE: Patentin Release #1.0, Version #1.30
: CURRENT APPLICATION DATA:
: APPLICATION NUMBER: US/08/915,136
: FILING DATE:
: CLASSIFICATION:
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: 08/480,504
: FILING DATE:
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: US 08/405,496
: FILING DATE: 16-MAR-1995
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: US 08/329,154
: FILING DATE: 25-OCT-1994
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: US 08/161,907
: FILING DATE: 02-DEC-1993
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: US 07/985,321
: FILING DATE: 04-DEC-1992
: PRIOR APPLICATION DATA:
: APPLICATION NUMBER: US 07/429,791
: FILING DATE: 31-OCT-1989
: ATTORNEY/AGENT INFORMATION:
: NAME: INOULTA, DIANE E.
: REGISTRATION NUMBER: 40,027
: REFERENCE/DOCKET NUMBER: 09HD-01763
: TELECOMMUNICATION INFORMATION:
: TELEPHONE: (415) 705-8410
: TELEFAX: (415) 397-8338
: INFORMATION FOR SEQ ID NO: 25:
: SEQUENCE CHARACTERISTICS:
: LENGTH: 1402 base pairs
: TYPE: nucleic acid
: STRANDEDNESS: double
: TOPOLOGY: linear
: MOLECULE TYPE: DNA (genomic)
: FEATURE:
: NAME/KEY: CDS
: LOCATION: 1..1386
: US-08-915-136-25
:
: Query Match 19.6%; Score 263; DB 4; Length 1402;
: Best Local Similarity 53.9%; Freq.No.2.6e-66;
: Matches 639; Conservative 0; Mismatches 525; Indels 21; Gaps:

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Db 118 AACCTCTGTTATCATATCCAGATGCTCATTTGGTGGCGGSCATCAAGCGAAGCT 177  
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 Db 178 ATCCACCTGGTTACACAGAAATCTCTGAAATTCGTCAGCAAGGCGCATGAGCATGAA 237  
 QY 211 TTCACTCCGCTGTTACCTGCTGCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 270  
 Db 238 TACAGACGATCTTACACACTTCACCTTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 297  
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 Db 478 TTCAAGCGTACCTGCTTACAAATGGGTTTCTCATCTCATCTCATCTCATCTCTCTCT 537  
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 QY 553 GAAGTATGCTTACGCTGATATCATCTTCAACCTGAGCGGCTGATGATGATGATGATG 612  
 Db 598 GCTATCGGTAGACAAACATCACTCTTAACTGAGCGCTGAGCAACAAACAAACAG 657  
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 Db 658 TAGATATCATGACAAAGTCTGCTGATCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 717  
 QY 673 GAACGGTACAGATCCAGCTTCTTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 732  
 Db 718 AACTGTATACGCTACCTGCTCTATCACTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 777  
 QY 733 ATGTAACAAAGATATATATGATGATGATGATGATGATGATGATGATGATGATGATG 792  
 Db 778 CGTTAGACACCAATATTCCTGATCCGCTGATGATGATGATGATGATGATGATGATG 837  
 QY 793 AAGAAAGCTCTCCGCTGCTGATGATGATGATGATGATGATGATGATGATGATGATG 852  
 Db 838 AAAAACAATCACTGATATGATGATGATGATGATGATGATGATGATGATGATGATG 897  
 QY 853 TACATCACTACCGGCGGCTGATGATGATGATGATGATGATGATGATGATGATGATGAT 912  
 Db 898 AACTGTATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 957  
 QY 913 TCTCAGTCAATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 972  
 Db 958 AACAAGCAATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1017  
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 Db 1018 AACAAACGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1077  
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 Db 1078 AGAATTCGCTGTTGTTCAAGGCTCCGCTGATCCGCTGATCAAAAAAATGAGAGCT 1137  
 QY 1087 AAAAATACGACGACGACGACGATCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCTCT 1146  
 Db 1138 GTTAAATCGCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1197  
 QY 1147 TCTACTGACGAATCGCTGATGATGATGATGATGATGATGATGATGATGATGATGATG 1206  
 Db 1198 GCTTCTC-----TGGGTCTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTT 1242

QY 1207 GAAGATACAAAGACTACTCTGATCTCCAAATGATACCTGAGAGGATTAACGCAAA 1266  
 Db 1243 GACCCGAAACCGGATCTGATGCTCTTCACTGATGATGATGATGATGATGATGATGAT 1302  
 QY 1267 CCGTACAAACCTGAAATCGGCTGATGATGATGATGATGATGATGATGATGATGAT 1326  
 Db 1303 -----ATCCTGGTGGGAGCTGATCTGCTCCGACGATGAAGGTTGGACC 1350  
 QY 1327 GATAGTAA 1335  
 Db 1351 AACGACTAA 1359  
 RESULT 9  
 US-08-280-228-3  
 ; Sequence 3, Application US/08280228  
 ; Patent No. 5571694  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Makoff Dr, Andrew J  
 ; APPLICANT: Romanos Dr, Michael A  
 ; APPLICANT: Clare Dr, Jeffrey J  
 ; APPLICANT: Fairweather Dr, Neil F  
 ; TITLE OF INVENTION: VACCINES  
 ; NUMBER OF SEQUENCES: 13  
 ; CORRESPONDENCE ADDRESS:  
 ; ADDRESSEE: NIXON & VANDERHYE P.C.  
 ; STREET: 1100 No. 5571694th Gledbe Road  
 ; CITY: Arlington,  
 ; STATE: Virginia  
 ; COUNTRY: U.S.A.  
 ; ZIP: 22201-4714  
 ; COMPUTER READABLE FORM:  
 ; MEDIUM TYPE: Floppy disk  
 ; COMPUTER: IBM PC compatible  
 ; OPERATING SYSTEM: PC-DOS/MS-DOS  
 ; SOFTWARE: Patentin Release #1.0, Version #1.25  
 ; CURRENT APPLICATION DATA:  
 ; APPLICATION NUMBER: US/08/280,228  
 ; FILING DATE: 25-JUL-1994  
 ; CLASSIFICATION: 435  
 ; PRIOR APPLICATION DATA:  
 ; APPLICATION NUMBER: US 07/618,312  
 ; FILING DATE: 27-NOV-1990  
 ; CLASSIFICATION: 435  
 ; PRIOR APPLICATION DATA:  
 ; APPLICATION NUMBER: GB 8926832.0  
 ; FILING DATE: 28-NOV-1989  
 ; PRIOR APPLICATION DATA:  
 ; APPLICATION NUMBER: GB 9006097.1  
 ; FILING DATE: 17-MAR-1990  
 ; ATTORNEY/AGENT INFORMATION:  
 ; NAME: Wilson, Mary J.  
 ; REGISTRATION NUMBER: 32,955  
 ; TELEPHONE/DOCKET NUMBER: 117-163  
 ; TELEPHONE: (703) 816-4000  
 ; TELEFAX: (703) 816-4100  
 ; TELEX: 200797 NIXN UR  
 ; INFORMATION FOR SEQ ID NO: 3:  
 ; SEQUENCE CHARACTERISTICS:  
 ; LENGTH: 1359 base pairs  
 ; TYPE: nucleic acid  
 ; STRANDEDNESS: double  
 ; TOPOLOGY: linear  
 ; MOLECULE TYPE: cDNA  
 ; HYPOTHEICAL: NO  
 ; ANTI-SENSE: NO  
 ; ORIGINAL SOURCE:  
 ; ORGANISM: Clostridium tetani  
 ; FEATURE:  
 ; NAME/KEY: CDS  
 ; LOCATION: 1..1356



ATTORNEY/AGENT INFORMATION:  
 NAME: INGOLTA, DIANE E.  
 REGISTRATION NUMBER: 40,027  
 REFERENCE/DOCKET NUMBER: OPHD-01763  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: (415) 705-8410  
 TELEFAX: (415) 397-8338  
 INFORMATION FOR SEQ ID NO: 27:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 3891 base pairs  
 TYPE: nucleic acid  
 STRANDEDNESS: double  
 TOPOLOGY: linear  
 MOLECULE TYPE: DNA (genomic)  
 FEATURE:  
 NAME/KEY: CDS  
 LOCATION: 1..3888  
 US-08-480-604A-27

Query Match 9.2%; Score 123; DB 1; Length 3891;  
 Best Local Similarity 50.2%; Pred. No. 1.3e-25;  
 Matches 396; Conservative 0; Mismatches 375; Indels 18; Gaps 3;

QY 20 AATACAAATTCGGAATTCCTGACAAATTCCTGAAACCGCTTACAAAGCAACATC 79  
 DB 2603 AATATATTAGAAATATTATTAATCTCTATTTGAATTTAAGATATGAAGTAATCAT 2662  
 QY 80 TGATGATCTGTCTGTAGCGTCTAA-----GTGGAAGTATCGACGGTGTGAAC 133  
 DB 2663 TAATAGACTTATCTAGATGACATCAAAAATAATATGTAGTAAGTAATTTTGATC 2722  
 QY 134 TGAATGACAGAACCACTTCAAACTGACCTCTCCGCTAATCTAAGATCCGCTACAC 193  
 DB 2723 CAATAGATAAAAATCAAAATCAATTTAATTAGAAATAGTAATTTGAGTATTT 2782  
 QY 194 AGAATCGAAGATCATCTTCACTCCGATTCCTGACCTCTGTTCTCTGTTCTGATTC 253  
 DB 2783 TAAAAAATGCTATGTATATATATATATATATATATATATATATATATATATAT 2842  
 QY 254 GTATCCGAAATACAAAGACGGTATCCGAATTCATCCAAATGAAATACCAATCA 313  
 DB 2843 GAATTCCTAAGTATTTTAAAGTAAAGTCTAAT-----AATGAATATACAAATA 2893  
 QY 314 TCAACTGCATGAAGATTAATCTGTTGGAAGATCTCCATCCGCGGAACCGTATCATCT 373  
 DB 2894 TAAATGTATGAAATCT 2953  
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 QY 434 AAGACATCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 490  
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 QY 491 ACAATGCTAAATCTACATCAACGTTAATCGAATCTAATACCGATCAACGATCC 550  
 DB 3074 AATACCTTAAT 3133  
 QY 551 GTGAAGTATGCTTAAGCGTGAATTCATCTTCAACCTGACGCGTGCATCGATCC 610  
 DB 3134 GTAAATTCATGCTAT 3193  
 QY 611 AGTTCATCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 670  
 DB 3194 GATATATTTGATTAAT 3253  
 QY 671 AAGAAAGCTACAAATCTGATCTTACCTGAAAGCTGATGATGATGATGATGATGATG 730  
 DB 3254 AAGATTATATGAT 3313  
 QY 731 TGATGATCTGTCTGTAGCGTCTAA-----GTGGAAGTATCGACGGTGTGAAC 133

DB 3314 TACAAATGATTAACCACTATATATGTTAAATTTATATGATCAAAATAATATGCTGATG 3373  
 QY 791 TGAAGAAG 799  
 DB 3374 TAAATATG 3382

## RESULT 11

US-08-405-496A-27  
 Sequence 27, Application US/08405496A  
 Patent No. 591965  
 GENERAL INFORMATION:  
 APPLICANT: WILLIAMS, JAMES A.  
 TITLE OF INVENTION: VACCINE FOR CLOSTRIDIUM BOTULINUM  
 TITLE OF INVENTION: NEUROTOXIN  
 NUMBER OF SEQUENCES: 30  
 CORRESPONDENCE ADDRESS:  
 ADDRESSEE: MEDLEN & CARROLL, LLP  
 STREET: 220 MONTGOMERY STREET, SUITE 2200  
 CITY: SAN FRANCISCO  
 STATE: CALIFORNIA  
 COUNTRY: USA  
 ZIP: 94104

## COMPUTER READABLE FORM:

MEDIUM TYPE: floppy disk  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: PatentIn Release #1.0, Version #1.30  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/08/405,496A  
 FILING DATE: 16-MAR-1995  
 CLASSIFICATION: 424

PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 08/329,154  
 FILING DATE: 25-OCT-1994  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 08/161,907  
 FILING DATE: 02-DEC-1993  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 07/985,321  
 FILING DATE: 04-DEC-1992

PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 07/429,791  
 FILING DATE: 31-OCT-1989

ATTORNEY/AGENT INFORMATION:  
 NAME: INGOLTA, DIANE E.

REGISTRATION NUMBER: 40,027  
 REFERENCE/DOCKET NUMBER: OPHD-01308

TELECOMMUNICATION INFORMATION:  
 TELEPHONE: (415) 705-8410  
 TELEFAX: (415) 397-8338

INFORMATION FOR SEQ ID NO: 27:  
 SEQUENCE CHARACTERISTICS:

LENGTH: 3891 base pairs  
 TYPE: nucleic acid  
 STRANDEDNESS: double  
 TOPOLOGY: linear

MOLECULE TYPE: DNA (genomic)  
 FEATURE:

NAME/KEY: CDS  
 LOCATION: 1..3888

US-08-405-496A-27

Query Match 9.2%; Score 123; DB 2; Length 3891;  
 Best Local Similarity 50.2%; Pred. No. 1.3e-25;  
 Matches 396; Conservative 0; Mismatches 375; Indels 18; Gaps 3;

QY 20 AATACAAATTCGGAATTCCTGACAAATTCCTGAAACCGCTTACAAAGCAACATC 79  
 DB 2603 AATATATTAGAAATATTATTAATCTCTATTTGAATTTAAGATATGAAGTAATCAT 2662  
 QY 80 TGATGATCTGTCTGTAGCGTCTAA-----GTGGAAGTATCGACGGTGTGAAC 133

DB 2663 TAAATGACTTATCTAGTATGATCAAAAATTAATTTGTAAGTAATTTTCATC 2722  
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 DB 2723 CAATAGATATAAATCAATTAATTAATTTGAAGAGTAATAATGAGTAATTT 2782  
 QY 194 AGAATGAGAACATCATCTTCAACCTCCGATTCCTGAGTCTCCGTTCCCTGAGATC 253  
 DB 2783 TAAAAAATGCTATGTATTAATTAATAGTATGAAAAATTTAGTACTTGGATTA 2842  
 QY 254 GATCCGGAATACAGAACAGAGTTCAGACCTTCAATTCACATGATCAACATCA 313  
 DB 2843 GAATTCCTAAGTATTTTAACAGTATTAAGCTAAAT-----AATGATATCAATAA 2893  
 QY 314 TCAATGATGAGAAATTAATCTGTTGGAATATCTCCATCCGCGGTACCGTATCATCT 373  
 DB 2894 TAAATGTATGGAATAATTAATCAAGATGGAAGTATCACTTAATTTATGTAATAATCT 2953  
 QY 374 GGAATGATGATATCAACAGGTAAGACCAATCTGTATCTTCCATATCAACATCCGCTG 433  
 DB 2954 GGAATTTACAGGATCTACAGAAATTAACAAAGAGTATTTTAATATACAGTCAATGA 3013  
 QY 434 AAGCATCTCTGATATCATCATCTGCTGCTGTTGCTTACATCAACATAA---CCTGA 490  
 DB 3014 TTAATATATGATATTAATTAACAGATGATTTTGTATCACTATATATATATATTA 3073  
 QY 491 ACAATGTAATCTATCATCAACAGGTAAGTATGTAATCTATATCCGATCAACATCAATCC 550  
 DB 3074 ATAACTTAAATTTTATTAATTAAGAAATTAATATATATTAATTAATTAATTAATTA 3133  
 QY 551 GTGAATGATGCTAGACGAGTGAATATCATCTTCAATGAGCGGTGATCATCTGATCC 610  
 DB 3134 GTATATTTATGATGATTAATTAATTAATTAATTTAAATTAATGATGATGATGATGATG 3193  
 QY 611 AGTTCATCTGATGAGAAATTAATCTGATGATGATGATGATGATGATGATGATGATG 670  
 DB 3194 GATATATTTGATTAATTAATTTTAATCTTTTATATAGATTAATTAATTAATTAATTA 3253  
 QY 671 AAGAACGCTATCAACAGTCTTACTCCGATATCTGAAAGACTTCTGGGTATTCGCG 730  
 DB 3254 AAGATTTATATGATTAATCAATCAAAATTCAGATTTTAAAGCTTTGGGATGATAT 3313  
 QY 731 TGAATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 790  
 DB 3314 TACATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 3373  
 QY 791 TGAGGAAG 799  
 DB 3374 TAAATTAATG 3382

Copied from 10910186 on 05-05-2004

RESULT 12  
 US-08-915-136-27  
 ; Sequence 27, Application US/08915136  
 ; Patent No. 6290960  
 ; GENERAL INFORMATION:  
 ; APPLICANT: KINK, JOHN A.  
 ; APPLICANT: THALLEY, BRUCE S.  
 ; APPLICANT: PADHE, NISHA V.  
 ; APPLICANT: FIRCA, JOSEPH R.  
 ; APPLICANT: STAFFORD, DOUGLAS C.  
 ; TITLE OF INVENTION: VACCINE AND ANTITOXIN FOR TREATMENT AND  
 ; PREVENTION OF C. DIFFICILE DISEASE  
 ; NUMBER OF SEQUENCES: 32  
 ; CORRESPONDENCE ADDRESSES:  
 ; ADDRESSEE: MEDLEN & CARROLL, LLP  
 ; STREET: 220 MONTGOMERY STREET, SUITE 2200  
 ; CITY: SAN FRANCISCO  
 ; STATE: CALIFORNIA  
 ; COUNTRY: UNITED STATES OF AMERICA  
 ; ZIP: 94104  
 ; COMPUTER READABLE FORM:  
 ; MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: Patent Release #1.0, Version #1.30  
 CURRENT APPLICATION DATA: 08/09/915,136  
 APPLICATION NUMBER: US/08/915,136  
 FILING DATE:  
 CLASSIFICATION:  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: 08/480,604  
 FILING DATE:  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 08/405,496  
 FILING DATE: 16-MAR-1993  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 08/329,154  
 FILING DATE: 25-OCT-1994  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 08/161,907  
 FILING DATE: 02-DEC-1993  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 07/985,321  
 FILING DATE: 04-DEC-1992  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 07/429,791  
 FILING DATE: 31-OCT-1989  
 ATTORNEY/AGENT INFORMATION:  
 NAME: INGOILA, DIANE E.  
 REGISTRATION NUMBER: 40,027  
 REFERENCE/DOCKET NUMBER: OPED-01763  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: (415) 705-8410  
 TELEFAX: (415) 397-8338  
 INFORMATION FOR SEQ ID NO: 27:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 3891 base pairs  
 TYPE: nucleic acid  
 STRANDEDNESS: double  
 TOPOLOGY: linear  
 MOLECULE TYPE: DNA (genomic)  
 FEATURE:  
 NAME/KEY: CDS  
 LOCATION: 1..3888  
 US-08-915-136-27  
 Query Match 9.2%; Score 123; DB 4; Length 3891;  
 Best Local Similarity 50.2%; Pred. No. 1.3e-25;  
 Matches 396; Conservative 0; Mismatches 375; Indels 18; Gaps 3

QY 20 AATACATTCGGAATCTGAAATATATCATCTCTGAAACCTCGCTTACAAAGACAAATC 79  
 DB 2603 AATATATTAGAAATATATTAATTAATCTCTATTAATTAATTAATTAATTAATTAAT 2662  
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 DB 2663 TAAATGACTTATCTAGTATGATCAAAATTAATTAATTTGATAGTAAGTAATTTGATC 2722  
 QY 134 TGAATGAGAACAGACCTTCAAACTGACCTCTCCGCTAAGTATGATCCGTTACTC 193  
 DB 2723 CAATAGATATAAATCAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTA 2782  
 QY 194 AGAATGAGAACATCATCTTCAACCTCCGATTCCTGAGTCTCCGTTCCCTGAGATC 253  
 DB 2783 TAAAAAATGCTATGTATTAATTAATAGTATGAAAAATTTAGTACTTGGATTA 2842  
 QY 254 GATCCGGAATACAGAACAGGTTATCCAGATTAATCAATCCATGATGATTAACCATCA 313  
 DB 2843 GAATTCCTAAGTATTTTAACAGTATTAAGCTAAAT-----AATGATATCAATAA 2893  
 QY 314 TCAATGATGAGAAATTAATCTGTTGGAATATCTCCATCCGCGGTACCGTATCATCT 373  
 DB 2894 TAAATGTATGGAATAATTAATCAAGATGGAAGTATCACTTAATTTATGTAATAATCT 2953  
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||||| 2954 GGACTTACAGGATCTCAGGAATAAACAAGAGTAGTTTTTAAATACAGTCAAAATGA 3013
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||||| 3014 TTAATATACAGATATATAAACAAGATGATTTTTTGTAACTATCAGTAATATAGATTAA 3073
||||| 491 ACAATGCTAAAATCTACATCAACGGTAACTGGAATCTAATACCGACATCAAGACATCC 550
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||||| 551 GTGAAGTTATCGTAAAGGTAATCACTTCAAACTGAGGTTGACATCGTATCCC 610
||||| 3134 GTAATATCGTATAGTAATAATAAATGTTTAAATAGATGGTTGTAGATACACAATA 3193
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||||| 3314 TACAATATGATAAACCATACTATATGTTTAAATTTATATGATCCAAATAAATATGTCGATG 3373
||||| 791 TGAAGAAAG 799
||||| 3374 TAAATAAG 3382

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RESULT 13
US08-700-651-1
; Sequence 1, Application US/08700651B
; Patent No. 6015882
; GENERAL INFORMATION:
; APPLICANT: PETERSEN, CAROLYN
; APPLICANT: LEECH, JAMES
; APPLICANT: NELSON, RICHARD, C.
; APPLICANT: GUT, JIRI
; TITLE OF INVENTION: VACCINES, ANTIBODIES, PROTEINS, GLYCOPROTEINS, DNAS AND RNAS
; TITLE OF INVENTION: FOR PROPHYLAXIS AND TREATMENT OF Cryptosporidium parvum
; TITLE OF INVENTION: INFECTIONS
; TITLE OF INVENTION: 480.19-4(HV)
; CURRENT FILING DATE: 1997-08-14
; EARLIER FILING DATE: 1995-04-03
; NUMBER OF SEQ ID NOS: 15
; SOFTWARE: Patent In Ver. 2.0
; LENGTH: 5163
; TYPE: DNA
; ORGANISM: Cryptosporidium parvum
US-08-700-651-1

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Query Match 5.3%; Score 70.6; DB 3; Length 5163;
Best Local Similarity 44.3%; Pred. No. 2.1e-10;
Matches 286; Conservative 0; Mismatches 359; Indels 0; Gaps 0;

QY 269 AGAAGCGGGTATCCAGATTTACATCCACATGAATACACATCATCATCACTGATGAAGA 328
DB 575 ACAACAACAACAACAACAACAACAACAACAACAACAACAACAACAACAACAACAACAACA 534
QY 329 ATAATCTGTTGGAGATCTCCATCCGCGGTAAACCGTATCATCTGGACTCTGATGATA 388
DB 635 ACAACAACAACAACAACAACAACAACAACAACAACAACAACAACAACAACAACAACAACA 694
QY 389 TCAAGGGTAAACCAACAACAACAACAACAACAACAACAACAACAACAACAACAACAACA 448
DB 695 ACAACAACAACAACAACAACAACAACAACAACAACAACAACAACAACAACAACAACAACA 754

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QY 449 ACATCAATCGCTGTTGTTTGGTTTACCATCACAATAAATCACTGAAACAATGCTAAATCTACA 508
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QY 509 TCAAGCGTAAATCTGGAATCTTATATACCGACATCAAAAGACATCGGTGAGTTATCGCTAAAG 568
DB 815 ACAATCTAACACACACACACACACACACACACACACACACACACACACACACACACACACACA 874
QY 569 GTGAATATCTTTCACAACTGGACGCGGTGACATCGATCGTACCCAGTTCTATCTGGATGAAT 628
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DB 995 ACAACTTACAACTTACCAAGAAACCAACTACTACTACTACTACTACTACTACTACTACTACTACT 1054
QY 749 ACTATATGTTCAATGCTGTAACAAGAACTCTTACATCAAACTGAAAGAAAGACTCTCCGG 808
DB 1055 ACTACTACTACTACTACTACTACTACTACTACTACTACTACTACTACTACTACTACTACTACTACT 1114
QY 809 TTGTTGAAATCTGACTCGTTCCTCAATACACACACACACACACACACACACACACACACACA 868
DB 1115 ACAACAACAACAACAACAACAACAACAACAACAACAACAACAACAACAACAACAACAACA 1174
QY 869 ACCTGTACATCGGTGAAAGTTTCATCATCGTCCGTCGCAAACTCTAACT 913
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RESULT 14
US-08-928-361B-4
; Sequence 4, Application US/08928361B
; Patent No. 601518
; GENERAL INFORMATION:
; APPLICANT: Petersen, Carolyn
; TITLE OF INVENTION: PEPTIDES, POLYPEPTIDES, GLYCOPROTEINS,
; TITLE OF INVENTION: THEIR FUNCTIONAL MUTANTS, VARIANTS, ANALOGS AND FRAGMENTS
; TITLE OF INVENTION: FOR TREATMENT AND DETECTION/DIAGNOSIS OF CRYPTOSPORIDIUM
; TITLE OF INVENTION: SPECIES INFECTIONS
; NUMBER OF SEQUENCES: 30
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: PETERS, VERNY, JONES & BIKSA
; STREET: 385 Sherman Avenue, Suite 6
; CITY: Palo Alto
; STATE: CA
; COUNTRY: USA
; ZIP: 94306-1840
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/928,361B
; FILING DATE: 12-SEP-1997
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 60/026,062
; FILING DATE: 13-SEP-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: VERNY, Hana
; REGISTRATION NUMBER: 30,518
; REFERENCE/DOCKET NUMBER: 480.76-1(HV)
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650-324-1677
; TELEFAX: 650-324-1678
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 5163 base pairs

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TYPE: nucleic acid  
STRANDEDNESS: double  
TOPOLOGY: linear  
MOLECULE TYPE: DNA (genomic)  
JS-08-928-361B-4

Query Match 5.3% Score 70.6; DB 3; Length 5163;  
Best Local Similarity 44.3%; Pred. No. 2.1e-10;  
Matches 286; Conservative 0; Mismatches 359; Indels 0; Gaps 0;

QY 269 AGAAGCGGTATCCAGAAATACATCCACAAATGAATACACCATCATCACTCATCACTGATGAGA 328  
DB 574 ACAACAAACAAACAAACAACTACTACTACTACTACTACTACTACTACTACTACTACTACTACT 633  
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DB 754 ACT 813  
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DB 814 ACAACAAACAAACAAACAAACAAACAAACAAACAAACAAACAAACAAACAAACAAACAAAC 873  
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DB 1054 ACTACTACTACCACAAACAAACAAACAAACAAACAAACAAACAAACAAACAAACAAACAAAC 1113  
QY 809 TTGGTGAATCTGACTGTTTCCAAATACAAACAGAACTCTAAATACATCACTACCGCG 868  
DB 1114 ACAACAAACAAACAAACAAACAAACAAACAAACAAACAAACAAACAAACAAACAAACAAAC 1173  
QY 869 ACCTGTACATCGGTGAAAGTTCATCTATCCGTCGCAATCTAACT 913  
DB 1174 ACCAAGAAACCAACAAACAAACAAACAAACAAACAAACAAACAAACAAACAAACAAAC 1218

RESULT 15

US-08-700-651-2  
Sequence 2, Application US/08700651B  
Patent No. 6015882

GENERAL INFORMATION:

APPLICANT: PETERSEN, CAROLYN  
APPLICANT: LEECH, JAMES  
APPLICANT: NELSON, RICHARD, C.  
APPLICANT: GUT, JIRI  
TITLE OF INVENTION: VACCINES, ANTIBODIES, PROTEINS, GLYCOPROTEINS, DNAS AND RNAS  
TITLE OF INVENTION: FOR PROPHYLAXIS AND TREATMENT OF Cryptosporidium parvum  
FILE REFERENCE: 480.19-4(HV)  
CURRENT APPLICATION NUMBER: US/08/700, 651B  
CURRENT FILING DATE: 1997-08-14  
EARLIER APPLICATION NUMBER: 08/415, 751  
EARLIER FILING DATE: 1993-04-03  
NUMBER OF SEQ ID NOS: 15

SOFTWARE: PatentIn Ver. 2.0

SEQ ID NO 2

LENGTH: 5318

TYPE: DNA

ORGANISM: Cryptosporidium parvum

US-08-700-651-2

Query Match 5.3% Score 70.6; DB 3; Length 5318;  
Best Local Similarity 44.3%; Pred. No. 2.1e-10;  
Matches 286; Conservative 0; Mismatches 359; Indels 0; Gaps 0;

QY 269 AGAAGCGGTATCCAGAAATACATCCACAAATGAATACACCATCATCACTCATCACTGATGAGA 328  
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QY 869 ACCTGTACATCGGTGAAAGTTCATCTATCCGTCGCAATCTAACT 913  
DB 1175 ACCAAGAAACCAACAAACAAACAAACAAACAAACAAACAAACAAACAAACAAACAAAC 1219

Search completed: November 1, 2002, 07:20:33

Job time : 84 secs

Copied from 10910186 on 05-05-2004

GenCore version 5.1.3  
Copyright (c) 1993 - 2002 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: November 1, 2002, 07:17:28 ; Search time 56 Seconds  
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Perfect score: 1341  
Sequence: 1 gaattcagtgatgccaacaa.....ggaccgaatagtaagaattc 1341

Scoring table: IDENTITY\_NUC

Gapop 10.0, Gapext 1.0

310279 seqs, 166577418 residues

Total number of hits satisfying chosen parameters: 620558

Maximum DB seq length: 0

Minimum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database: Published Applications\_NA.\*

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- 3: /cgn2\_6/ptodata/2/pubpna/US06\_NEW\_PUB.seq.\*
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- 14: /cgn2\_6/ptodata/2/pubpna/US60\_PUBCOMB.seq.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Rank	Query No.	Score	Match	Length	ID	Description
1	1339.4	99.9	1341	10	US-09-350-756-2	Sequence 2, Appli
2	736	54.9	3876	12	US-10-051-952-3	Sequence 3, Appli
3	657	49.0	3876	12	US-10-051-952-2	Sequence 2, Appli
4	417	31.1	1347	10	US-09-350-756-6	Sequence 6, Appli
5	263	19.6	1338	10	US-09-350-756-1	Sequence 1, Appli
6	242.6	18.1	1313	8	US-08-981-087A-6	Sequence 6, Appli
7	242.6	18.1	1317	10	US-09-350-756-5	Sequence 5, Appli
8	221.6	16.5	702	10	US-09-350-756-10	Sequence 10, Appli
9	218.6	16.3	3894	12	US-10-053-952-9	Sequence 9, Appli
10	160	11.9	1400	10	US-09-350-756-4	Sequence 4, Appli
11	123	9.2	1327	10	US-09-350-756-9	Sequence 9, Appli
12	123	9.2	4835	10	US-09-288-326-10	Sequence 10, Appli
13	119.8	8.9	3891	12	US-10-051-952-1	Sequence 1, Appli
14	118.8	8.9	1371	10	US-09-350-756-3	Sequence 3, Appli
15	105.8	7.9	2452	10	US-09-350-756-7	Sequence 7, Appli
16	96	7.2	1293	8	US-08-981-087A-5	Sequence 5, Appli
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19	81.8	6.1	3753	12	US-10-051-952-6	Sequence 6, Appli

20	80.2	6.0	3759	12	US-10-051-952-7	Sequence 7, Appli
21	79.4	5.9	3825	12	US-10-051-952-8	Sequence 8, Appli
22	53	4.0	3876	12	US-10-051-952-4	Sequence 4, Appli
23	52.8	3.9	432	10	US-09-864-761-32943	Sequence 32943, A
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25	48.8	3.6	867	10	US-09-216-393-340	Sequence 340, App
26	48.8	3.6	867	10	US-09-216-393-342	Sequence 342, App
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28	48.8	3.6	1397	10	US-09-216-393-345	Sequence 345, App
29	46	3.4	583	10	US-09-864-761-20772	Sequence 20772, A
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32	39.2	2.9	327	10	US-09-864-761-28059	Sequence 28059, A
33	39.2	2.9	766	10	US-09-864-761-19608	Sequence 19608, A
34	39.2	2.9	1944	10	US-09-864-761-2825	Sequence 2825, Ap
35	38.8	2.9	2022	10	US-09-899-471-3	Sequence 3, Appli
36	37	2.8	439	10	US-09-864-761-20174	Sequence 20174, A
37	36.4	2.7	8147	12	US-10-109-886-9	Sequence 9, Appli
38	36	2.7	549	10	US-09-815-242-1682	Sequence 1682, Ap
39	36	2.7	1266	10	US-09-815-242-8722	Sequence 8722, Ap
40	36	2.7	18596	10	US-09-860-107-1350	Sequence 1350, Ap
41	36	2.7	18596	10	US-09-967-768A-119	Sequence 119, App
42	35.8	2.7	574	10	US-09-864-761-228	Sequence 228, App
43	35.8	2.7	669	10	US-09-864-761-17051	Sequence 17051, A
44	35.6	2.7	1818	10	US-09-801-368-427	Sequence 427, App
45	35.4	2.6	15720	10	US-09-922-217-1058	Sequence 1058, Ap

ALIGNMENTS

RESULT 1

US-09-350-756-2

Sequence 2, Application US/09350756

Patent No. US20020034521A1

GENERAL INFORMATION:

APPLICANT: U.S. Army Medical Research Institute for Infectious Diseases

APPLICANT: John S. Lee

APPLICANT: Peter Pushko

APPLICANT: Michael D. Parker

APPLICANT: Jonathan F. Smith

APPLICANT: Mark T. Dertzbaugh

APPLICANT: Leonard Smith

TITLE OF INVENTION: Botulinum Neurotoxin Vaccine

FILE REFERENCE: 003/124/SAP RIID 98-21

CURRENT APPLICATION NUMBER: US/09/350,756

EARLIER FILING DATE: 1999-07-09

EARLIER FILING DATE: 1998-07-10

NUMBER OF SEQ ID NOS: 11

SOFTWARE: Apple Macintosh Microsoft Word 6.0

SEQ ID NO 2

LENGTH: 1341

TYPE: DNA

ORGANISM: Artificial

FEATURE:

OTHER INFORMATION: /note="synthetic sequence encoding botulinum neurotoxin"

US-09-350-756-2

Query Match 99.9%; Score 1339.4; DB 10; Length 1341;

Best Local Similarity 99.9%; Pred. No. 0;

Matches 1340; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

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Db 1 GAATTCAGATGCGCAACAACAATATACAAATCCGAAATATATCCCTGAACCTG 60

QY 61 CGTTACAAAGACAAACTGATCGATCTGCTGTTACGGTGTAAAGTTGAAGTATAC 120

Db 61 CGTTACAAAGACAAACTGATCGATCTGCTGTTACGGTGTAAAGTTGAAGTATAC 120

QY 121 GACGGTGTGACTGAATGACAGAACCCAGTTCAACTGACCTCTCCGCTACTCTAAG 180

Db 121 GACGGTGTGACTGAATGACAGAACCCAGTTCAACTGACCTCTCCGCTACTCTAAG 180





Query Match 49.0%; Score 557; DB 12; Length 3876;  
Best Local Similarity 68.4%; Pred. No. 9.8e-177;  
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63 TTACAAGACAAATCTGATCGATCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 122  
DB 2607 ATATAGAGATAAATTAATTAATAGATTTATCAGGATATGAGCAAGGATAGAGGTATATGA 2666

123 CGGTGTTGAACCTGAATGACAAGAACCAAGTCAAACTGCACTCTTCGCTGAAGCTCAAGAT 182  
DB 2667 TGGGGTCAAGCTTAATGATTAATAATCAATTTAAATTAATCTAGTTCAGCAGATAGTAAGAT 2726

183 CGGTGTTGATCAGAAATCAGAAATCAATCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 242  
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DB 2787 CTTTGGTAAGATACCTTAATATAGTAATGATGATATACAAATATATATTCATAATGA 2846

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363 CGGTATCATCTGCACTCTGATCGATATCAAGGTAAAGAACCAATCTGCTGCTGCTGCTGCTGCT 422  
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423 CAACATCCGTTGAAGACATCTCTGAATACATCAATCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 482  
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DB 3087 AGATATAGGAGAGATTTATTTGATGATGAAATTAATTAATAGTGGTATGATGATA 3146

603 TCGTACCAGCTTCATCTGGATGAAATCTCTCCATCTTCAACACCGAACTGCTGCTGCTGCTGCT 662  
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DB 3387 GAATCCAAATTAATAATTAAGAAATTTATATATGAGAAATTTATTAAGAAG 3446

903 CAATCTCACTCTCAGTCCATCATCAATGATGACATCGTACGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 962  
DB 3447 AGAGTCAAAATCTCAATCTCAATGATGATATAGTTAGAAAGAGAGATATATATACATCT 3506

963 GGACTTCTCACTCTCACTGAGTACGAGGATCGGCTGATATACCTTACCAAGTACTTCAAGAAAGA 1022  
DB 3507 AGATTTGGTACTTCACCATGNAGAGTGGAGATATATGCTATATAATTTTAAAGGAACA 3566

610 CAGTTATCTGATGAATAACTCTCCATCTTCAACACCGCAACTGCTCTCAAGTCAAAATC 669  
3154 CAATTTATTTGGATGAAATATTTTCAATCTTCAATCTTCAATCTTCAATCTTCAATCTTCAATCTTCAATCTT 3213

670 GAAGAACGGTCAAGNCCAGCTCTTACTCCGAATCTCTGAAAGACTTCTGGGTAAATCCG 729  
DB 3214 GAAGAACGATTAATTTCAATCTATAGCGAATATTTAAAGATTTTGGGGAATCT 3273

730 CTGATGTACAACAAAGATACTATATGTTCAATCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 789  
DB 3274 TTAATGTAGATAAAGATAATATATGTTTAAATCGGGGAATAAATTTATATATTAATA 3333

790 CTGAGAGAGACTCTCCGGTGGTGAATCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 849  
DB 3334 CTAAAGAAAGATCTACCTGTAGGTGAATTTTACAGCTGCAAAATTAATCAAAATCT 3393

850 AAATACATCAACTACCGGCACTGTACATCGGTGAAAGTTTCATCATCGCTGCGAAATCT 909  
DB 3394 AAATATATAAATTAAGAGATTTATATATGCGAAGAAATTTATTAAGAAAGAAAGTCA 3453

910 RACTCTGATCAATCAATGATGACATCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 969  
DB 3454 AAATCTCAATCTTAATAATGATGATATAGTTAGAAAGAAAGATTTATATATCTAGATTT 3513

970 TTCAACCTGAATCAGGAATGGCTGTATACCTACAGTACTTCAAGAAAGAAAGAA 1029  
DB 3514 TTAAATTAATCAAGAGTGGAGAGTATATACCTATTAATTTTAAAGAAAGAGAA 3573

1030 RAGCTTTCTGCT 1089  
DB 3574 AAATGTTTTAGCTCCCTTAAGTATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 3633

1090 GAATACGAGAACACCGCACTACTCTTCCGAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1149  
DB 3634 GAATATGATGACACGCAACATATATTTGCTAGTCTGCTTTTAAAGAAAGATGAAGAAAGT 3693

1150 ACTGAGAAATCGGCT 1209  
DB 3694 ACTGAT 3753

1210 GAATACAAAGACTACTCTTGCATCTCCAAATGGTACCTGAAAGAGTTTAAACGCAAAACCG 1259  
DB 3754 GAGTAAAGATTAATTTGTTAAGTAAATGGTAAAGAGGTTAAAGAGGAAACCA 3813

1270 TACAACCTGAACCTGGGTGCT 1329  
DB 3814 TATAATTTAAATTTGGATGTAATTTGGCAGTTTATTCCTAAAGATGAAGGGTGGACTGAA 3873

1330 TA 1331  
DB 3874 TA 3875

RESULT 3  
US-10-051-952-2  
Sequence 2, Application US/10051952  
Patent No. US20020107199A1  
GENERAL INFORMATION:  
APPLICANT: Walker, Patricia  
TITLE OF INVENTION: Methods of Administering Botulinum Toxin  
FILE REFERENCE: 2933CIP  
CURRENT APPLICATION NUMBER: US/10/051,952  
CURRENT FILING DATE: 2002-01-17  
PRIOR APPLICATION NUMBER: 09/730,237  
PRIOR FILING DATE: 2000-12-05  
NUMBER OF SEQ ID NOS: 12  
SOFTWARE: PatentIn Ver. 2.1  
SEQ ID NO 2  
LENGTH: 3876  
TYPE: DNA  
ORGANISM: botulinum toxin  
US-10-051-952-2

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QY 1023 AGAAGAAAGCTTTTCTGGTCCGATCTGTGTTCCGACGAACCTCTACACACCACTCA 1082
DB 3567 GGAAGAAAGCTTTTCTGGTCCGATCTGTGTTCCGACGAACCTCTACACACCACTCA 3626
QY 1083 GATCAAGAAATACAGCAACAGCGACCTACTCTGTCAGCTGCTGTTCAAGAAAGATGA 1142
DB 3627 AATAAGAAATATGATGAACGACCATCATATAGTTGTGAGTTGCTTTTAAAAAAGATGA 3686
QY 1143 AGATCTACTGACGAAATCGCTGTCGATCGGTATCCACCGTCTTCTACGAATCTGTATCGT 1202
DB 3687 AGAAGTACTGATGATATAGGATGATGATGATGATGATGATGATGATGATGATGATGAT 3746
QY 1203 ATTCAAGAAATACAGCAACAGCGACCTACTCTGTCAGCTGCTGTTCAAGAAAGATGA 1262
DB 3747 AATAAGAAATATGATGAACGACCATCATATAGTTGTGAGTTGCTTTTAAAAAAGATGA 3806
QY 1263 CAACCGTACACGAAATCGCTGTCGATCGGTATCCACCGTCTTCTACGAATCTGTATCGT 1322
DB 3807 GAAACCATATAGTCAAAATTTGGATGATGATGATGATGATGATGATGATGATGATGATGAT 3866
QY 1323 GACCGAATA 1331
DB 3867 GACTGAATA 3875

RESULT 4
US09-350-756-6
Sequence 6, Application US/09350756
Patent No. US20020034521A1
GENERAL INFORMATION:
APPLICANT: U.S. Army Medical Research Institute for Infectious Diseases
REPLICANT: John S. Lee
REPLICANT: Peter Pushko
REPLICANT: Michael D. Parker
REPLICANT: Jonathan F. Smith
REPLICANT: Mark T. Dertzbaugh
REPLICANT: Leonard Smith
FILE OF INVENTION: Botulinum Neurotoxin Vaccine
FILE REFERENCE: 003/124/SAP RIID 98-21
CURRENT APPLICATION NUMBER: US/09/350,756
CURRENT FILING DATE: 1999-07-09
EARLIER APPLICATION NUMBER: US 60/092,416
EARLIER FILING DATE: 1998-07-10
NUMBER OF SEQ ID NOS: 11
SOFTWARE: Apple Macintosh Microsoft Word 6.0
SEQ ID NO 6
LENGTH: 1347
TYPE: DNA
ORGANISM: Artificial
FEATURE:
OTHER INFORMATION: /note="synthetic sequence encoding botulinum neurotoxin"
US09-350-756-6

Query Match 31.1%; Score 417; DB 10; Length 1347;
Best Local Similarity 60.3%; Pred. No. 9e+109;
Matches 807; Conservative 0; Mismatches 505; Indels 27; Gaps 6;

QY 5 TCAGTGGCCCAAAATACAAATCCGAAATCCCTGNAACAATATCATCTGAACCTGCGTT 64
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QY 65 ACAAGAACAAATCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 124
DB 80 ACCGTGGTGGTGTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 139
QY 125 GTGTTCAACTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 178
DB 140 ACCTGATCTTCACGACATCGGTACGGTACGGTACGGTACGGTACGGTACGGTACGGTAC 199
QY 179 AGATCGGTGTACTCAGAAATCAGAAATCAGAAATCAGAAATCAGAAATCAGAAATCAGAA 238
DB 200 ACATCACCACCAGTCCAAAGTTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTC 259

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QY 239 TTTCTTCTGTGATCTCCGAAATACAAAGACGAGGTATCCAGAATTATCATCCACA 298
DB 260 TCAACTTCTGGTCCGTTACCCAAAGTACAAACACGACATCCAGACCTACCTGCAGA 319
QY 299 ATGAATACACCATCATCAAGTCAAGAAATACCTGTTGGTGGTGGTGGTGGTGGTGGTGG 358
DB 320 ACGAGTACACCATCATCTGTTGATCAAGAACGACTCCCGTTGGAAAGTCTCCATCAAG 379
QY 359 GTAACCGTATCATCTGACCTGATGATGATGATGATGATGATGATGATGATGATGATGAT 418
DB 380 GAAACCGTATCATCTGACCTGATGATGATGATGATGATGATGATGATGATGATGATGAT 439
QY 419 AATCAACATCCGTGAGACATCTCTGAATACATCAATCGCTGGTGGTGGTGGTGGTGGT 478
DB 440 AGTACTCCATCAAGACAAATCTCCGACTACATCAACAAAGTGGTGGTGGTGGTGGTGG 499
QY 479 CCAATAAC---CTGAACATGCTAAATCTACATCAACGCTAAACCTGGAATCAATACCG 535
DB 500 CCAAGACGCTGCTGGTACGCAACATCTACATCAACGCTGCTGGTGGTGGTGGTGGTGG 559
QY 536 ACATCAAGACATCCGTGAGTATCTGCTAACCGTGAATCATCTTCAAACTGGACGGTG 595
DB 560 AGATCTGAACCTGGACCGTATCAACTCTCCAAACGACATCGACTTCAAGCTGATGAAT 619
QY 596 ACATCGATCTACCCAGTTCATCTGGGATGAATACTTCTCCATCTTCAACACGAACTGT 655
DB 620 GTACCGACACCAACGATGCTGTCGATCAAGGACTTCAACATCTTCGGTGGTGGTGGT 679
QY 656 CTCAGTCCAAATACGAAGACGCTACGATCCAGTCTTACTCCGAATACCTTCAAAAGCT 715
DB 680 ACGCCACCGAGTCTCCCTCCCTGATCTGATGATGATGATGATGATGATGATGATGATGAT 739
QY 716 TCTGGGTAATCCGCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 775
DB 740 TCTGGGTAATCCGCTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 799
QY 776 ACTCTTACATCAAACTGAAGAAAGTCTCTCGGTGTTGTTGAAATCTCTGACTCGTTCCAA 835
DB 800 ACATCTACATCAAGTACTTCTCAGGCTCCATGCTGGTGGTGGTGGTGGTGGTGGTGG 859
QY 836 ACAACAGAACTTAAATACATCAACGACGCTGATGATGATGATGATGATGATGATGATGAT 895
DB 860 TCAACAACGCGC-----CATCACTACCAAGAACTGTACCTGGTGGTGGTGGTGGTGG 913
QY 896 TCCGTGCGAAATCTAACTC---TCAGTCCATCAATGATGATGATGATGATGATGATGATGAT 952
DB 914 TCAAGAACGCTCCAACTCCCGTACATCAACGACGACATCGTCCGTTGAGGTTGACT 973
QY 953 ACATCTACCTGACTTCTTCAACT---GAATCAGGAATGGGTGATACACCTACAAGT 1009
DB 974 ACATCTACCTGACTTCTTCAACT---GAATCAGGAATGGGTGATACACCTACAAGT 1033
QY 1010 ACTTCAAGAAAGAAAGAAAGCTTTTCTGGTCCGATCTCTGATTCGAGCAACTCT 1069
DB 1034 ACTTCAAGAAAGAAAGAAAGCTTTTCTGGTCCGATCTCTGATTCGAGCAACTCT 1093
QY 1070 ACAACACCATCCAGATCAAGAAATACGACGACGACGACGACGACGACGACGACGACGAC 1129
DB 1094 ACGAGTCTGTCGATCAAGAAATACGACGACGACGACGACGACGACGACGACGACGACGAC 1153
QY 1130 TCAAGAACGATGAAGAAATCTACTGACGAAATCGGTGATGATGATGATGATGATGATGAT 1189
DB 1154 GCGAAGGACGACGACGACGACGACGACGACGACGACGACGACGACGACGACGACGACGAC 1207
QY 1190 AATCTGGTATCTGATTCGAAGAAATACAAAGTACTTCTGATCTCCAAATGGTACCTGA 1249
DB 1208 ACTACGTTTACGTCGTCGACGACCTACGACGACGACGACGACGACGACGACGACGACGAC 1267
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DB 1268 GTCGATCTCCGAGAACATCAACAGCTGCGTCTGGGATGATGATGATGATGATGATGATGAT 1327
QY 1310 AAGACGAGGTGGACCGA 1328

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Db 1328 TCGACGAGGTTGGACCA 1346
RESULT 5
US-09-350-756-1
; Sequence 1, Application US/09350756
; Patent No. US20020034521A1
; GENERAL INFORMATION:
; APPLICANT: U.S. Army Medical Research Institute for Infectious Diseases
; APPLICANT: John S. Lee
; APPLICANT: Peter Pushko
; APPLICANT: Michael D. Parker
; APPLICANT: Jonathan F. Smith
; APPLICANT: Mark T. Dertzbaugh
; APPLICANT: Leonard Smith
; TITLE OF INVENTION: Botulinum Neurotoxin Vaccine
; FILE REFERENCE: 003/124/SAP RID 98-21
; CURRENT APPLICATION NUMBER: US/09/350,756
; CURRENT FILING DATE: 1999-07-09
; EARLIER APPLICATION NUMBER: US 60/092,416
; EARLIER FILING DATE: 1998-07-10
; MEMBER OF SEQ ID NOS: 11
; SOFTWARE: Apple Macintosh Microsoft Word 6.0
; SEQ ID NO 1
; LENGTH: 1338
; TYPE: DNA
; ORGANISM: Artificial
; FEATURE:
; OTHER INFORMATION: /note="synthetic sequence encoding botulinum neurotoxin"
US-350-756-1
Query Match 19.6%; Score 263; DB 10; Length 1338;
Local Similarity 53.9%; Pred. No. 5.3e-65;
Matches 639; Conservative 0; Mismatches 525; Indels 21; Gaps 4;
15 CAACAATCAATTCGGAATCCTGAACAATATATCTGACCTGCTGCTTACAAAGCAA 74
32 CACTGATACATCAAGAATCATCATCAATACCTTCATCTGACCTGCGTACGAATCAA 91
75 CAATCGATCGATCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 129
92 TCACCTGATCGATCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 151
130 -GAACGATGATCAACAAGCAAGTCAAACTGCTGCTGCTGCTGCTGCTGCTGCTGCT 188
152 CGATCGATCGACGAAGATCAAGATCAAGATCAAGATCAAGATCAAGATCAAGAT 211
189 TACTCAGATCAAGATCAAGATCAAGATCAAGATCAAGATCAAGATCAAGATCAAG 248
212 TATCCTGAAGATGCTATCGTATACAACTCTATGTACGAAACTTCTCCACTCTCT 271
249 GATCGTATCCGAAATCAAGACGCGGTATCCAGATTTACATCCCAATCAAGATCAC 308
272 GATCGGTATCCGAAATCAAGATCAAGATCAAGATCAAGATCAAGATCAAGATCAC 322
309 CATCATCAACTGATCAAGATCAAGATCAAGATCAAGATCAAGATCAAGATCAAG 368
323 CATCATCAACTGATCAAGATCAAGATCAAGATCAAGATCAAGATCAAGATCAAG 382
369 CATCTGATCTGATGATCAAGATCAAGATCAAGATCAAGATCAAGATCAAGATCA 428
383 CATCTGATCTGATGATCAAGATCAAGATCAAGATCAAGATCAAGATCAAGATCA 442
429 CCGTGAAGATCTGATGATCAAGATCAAGATCAAGATCAAGATCAAGATCAAGAT 485
443 GATGATCAAGATCTGATGATCAAGATCAAGATCAAGATCAAGATCAAGATCAAG 502
486 CCGTGAAGATCTGATGATCAAGATCAAGATCAAGATCAAGATCAAGATCAAGAT 545
503 TCTGAATCAAGATCTGATGATCAAGATCAAGATCAAGATCAAGATCAAGATCAAG 562
546 CATCCGTGATGATCTGATGATCAAGATCAAGATCAAGATCAAGATCAAGATCAAG 605
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Db 563 TCTGGTAACATCCACGCTTCTAATAACATCATCTTCAAACTGGACGTTGCTGTCACAC 622
QY 606 TACCCAGTTCACTGGAATGAATATCTTCCATCTTCAACACGAGACTCTCTCAGTCCAA 665
Db 623 TCACCGCTACATCTGGATCAAAATATCTTCAATCTGTTGCGAAGAAAGAACTGAACAAAGA 682
QY 666 TATCGAAGAAGGCTACAAAGATCCAGTCTTACTCCGAATACCTGAAAGACTTCTGGGGTAA 725
Db 683 ATCAAAAGACCTGTAGGACCAACAGTCCATCTCTGTTGTTGATCTGAAAGACTTCTGGGGTGA 742
QY 726 TCCGCTGATGATCAACAAGAAATATCTTCAATCTGTTGTTGTTGTTGTTGTTGTTGTTGTT 785
Db 743 CTACCTGAGTACGACAAACAGTATCTATCTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTT 802
QY 786 CAAACTGAAGAAGACTCTCCGCTTGTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTT 845
Db 803 TGACGTCACATATGTAGGTATCCCGGTTTACATGTACCTGAAAGGTCGCGTGTCTGTGT 862
QY 846 CTCTAAATACATCAACTACCGGACCTGTAGTATCGGTGTTGTTGTTGTTGTTGTTGTTGTTGTT 905
Db 863 TATGACTACCAACATCTTACCTGAACTCTTCCCTGTACCGGTTGTTGTTGTTGTTGTTGTTGTTGTT 922
QY 906 ATCTAATCTCAGTCCATCAATGATGATCATCTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTT 965
Db 923 GAATACGGGCTGTGTACAGGACATATCGTTGCGCAATGATCTGTATACATCAA 982
QY 966 CTCTTCAACCTGAATAGGAGTGGGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTT 1025
Db 983 TCTGTAGTTAAACAAGAAATACCGTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1042
QY 1026 AGAAAGCTTTTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1085
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RESULT 6
US-08-981-087A-6
; Sequence 6, Application US/08981087A
; Patent No. US20020081304A1
; GENERAL INFORMATION:
; APPLICANT: Elmore, Michael J.
; APPLICANT: Mauchline, Margaret L.
; APPLICANT: Minton, Nigel P.
; APPLICANT: Pasechnik, Vladimir A.
; APPLICANT: Titball, Richard W.
; TITLE OF INVENTION: TYPE F BOTULINUM TOXIN AND USE THEREOF
; NUMBER OF SEQUENCES: 6
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: NIXON & VANDERHUYE P.C.
; STREET: 1100 No. US20020081304Alth Giebe Rd. 8th floor
; City: Arlington
; STATE: VA
; COUNTRY: USA
; ZIP: 22201-4741
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/981,087A
; FILING DATE: 27-MAY-1998
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
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Query Match	16.5%	Score 221.6	DB 10	Length 702
Best Local Similarity	61.1%	Prod. No. 2.2e-53		
Matches 419	Conservative	0	Mismatches 249	Indels 18
QY	15	CAACAAATACAAATTCGGAAATCCTGAACAATATCATCTGAACCTGGTTTACAAAGACAA 74		
DB				
QY	24	CACGTGATACATCAAGAACATCATCAATACCTCCATCTGAACTGCGCTAGCAATCCAA 83		
DB				
QY	75	CAATCTGATCGATCTGTCTGGTTTACGGTGTCTAAGTTGAAGTATACGACGGTGT 129		
DB				
QY	84	TCACCTGATCGACCTGTCTCGGTACGTCTCCAAATCAACATCGGTTCTAAGTTAACTT 143		
DB				
QY	130	-GAACTGAATGACAAGAACAGTTCAAACTGACCTCTTCGGCTAACTCTAAGATCCGTGT 188		
DB				
QY	144	CGATCCGATCGACAGAAGATCAGATCCAGCTGTTCATCTGGAATCTTCCAAAATCGAAT 203		
DB				
QY	189	TACTCAGAATCAGAACAATCATCTTCACTCCGTATCTCTGGACTTCTCTGTTTCTCTTCTG 248		
DB				
QY	204	TATCTGAAGAATGCTATCGTATACAACTATCTGTAGGAACACTTCTCCACCTCTCTG 263		
DB				
QY	249	GATTCGTATCCCGAAATACAGAAGCAGGTATCCAGAAATTACATCCACCAATGAATACAC 308		
DB				
QY	264	GATCCGTATCCGGAATACTTCAACTCC-----ATCTCTGGAACAATGAATACAC 314		
DB				
QY	309	CATCATCAACTGATGAAGAATAACTCTGGTTTGAAGATCTCCATCCCGGTAAACGGTAT 368		
DB				
QY	315	CATCATCAACTGATGAAGAACAATCTGGTTTGAAGATATCTCTGAACACTACGGTGAAT 374		
DB				
QY	369	CATCTGACTCTGATCGATATCAACGGTAAAGACCAAACTCTGTTCTTCGAATACAACT 428		
DB				
QY	375	CATCTGACTCTGCAAGACACACGGAATCAACACGGCTGTTGTTATCAANTACTCTCA 434		
DB				
QY	429	CGGTGAAGACATCTCTGAATACATCAATCGTGGTTCTTTCGTACCATCACCAATTA 485		
DB				
QY	435	GATGATCAACATCTCTGACTACATCAATCGTGGATCTTCTGTACCATCACCAACATG 494		
DB				
QY	486	CCTGAACAATCGTAAATCTTACATCAACGGTAAACTGGAATCTAATACCGACATCAAGA 545		
DB				
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DB				
QY	606	TACCCAGTTCATCTGGATGAATACTTCTCCACTTTCACACCGAACTGTCTCAGTCCAA 665		
DB				
QY	615	TCACGGCTACATCTGGATCAATACTTCAATCTGTGTGACAAAGACTGAACGGAAGAAG 674		
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DB				

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RESULT 8
JS-09-350-756-10
; Sequence 10, Application US/09350756
; Patent No. US20020034521A1
; GENERAL INFORMATION:
; APPLICANT: U.S. Army Medical Research Institute for Infectious Diseases
; APPLICANT: John S. Lee
; APPLICANT: Peter Pushko
; APPLICANT: Michael D. Parker
; APPLICANT: Jonathan F. Smith
; APPLICANT: Mark T. Dertzbaugh
; APPLICANT: Leonard Smith
; TITLE OF INVENTION: Botulinum Neurotoxin Vaccine
; FILE REFERENCE: 003/124/SAP RIID 98-21
; CURRENT APPLICATION NUMBER: US/09/350.756
; CURRENT FILING DATE: 1999-07-09

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;; CURRENT FILING DATE: 2002-01-17  
;; PRIOR APPLICATION NUMBER: 09/730,237  
;; PRIOR FILING DATE: 2000-12-05  
;; NUMBER OF SEQ ID NOS: 12  
;; SOFTWARE: PatentIn Ver. 2.1  
;; SEQ ID NO 9  
;; LENGTH: 3894  
;; TYPE: DNA  
;; ORGANISM: Artificial Sequence  
;; FEATURE:  
;; OTHER INFORMATION: Description of Artificial Sequence: synthetic  
;; OTHER INFORMATION: primers used to introduce stu I and EcoR I  
;; OTHER INFORMATION: Restriction sites into the 5' and 3' ends of the  
;; OTHER INFORMATION: Bont/A-L chain gene fragment  
;; US-10-051-952-9

Query Match 15.38; Score 218.6; DB 12; Length 3894;  
Best Local Similarity 51.18; Pred. No. 4e-52;  
Matches 680; Conservative 0; Mismatches 624; Indels 27; Gaps 6;  
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QY 76 AATCGATCGATCTCTGGTACGGTCTAAAGTGAAGTGAATATACGAGGTGTGAAGTG 135  
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QY 136 AATGA-----CAAGAACCGATTCAACTGACCTCTCCGCTAACTCTAAGATCCGCTG 189  
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QY 190 ACTCAGATCAGAACATCATCTCACTCCGATCTCTGCGACTCTCTCTCTCTCTCTCTG 249  
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QY 250 ATTCGATCCCGAATACAGACGACGGTATCCAGATTAATCCCAATGAATACACACC 309  
DB 2815 GTAAGGACTCTTAATATAATTAATTAATGAATATCAACTTATCTTCAAAATGATATACA 2874  
QY 310 ATCATCACTGCATGAAGAATACTCTGGTGGGAAGATCTCCATCCCGGTAAACCGGTATC 369  
DB 2875 ATAATTAGTGTATATAAATGACTCAGGATGGAAGATCTATTAAAGGGAATAGAAATA 2934  
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DB 2935 ATATGACATTAATAGATGTTAATGCAAAATCTAAATCAATATTTTTCGATATAGTATA 2994  
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DB 2995 AAGATAATATATCAGATTTATATAATAAATGATTTTCCATAACTATTACTAATGATAGA 3054  
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DB 3055 TTAGGTAAAGCAAAATTTTATATAATGGAAGTTTGAATAAAGATGAAATTTTAAAC 3114  
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DB 3115 TTAGATAGAAATTAATCTAGTAAATGATATAGATCTCAAAATTAATTAATTTGACAGATACT 3174  
QY 607 ACCGATTCATCGATGAATATCTCTCCATCTTCCACACCGCACTCTCTCAGTCCCAAT 666  
DB 3175 ACTAAATTTGTTGGATTAAGATTTTAAATTTTGTAGAGAAATTAATAGTCTACAGAA 3234  
QY 667 ATCGAAGACGGTACAGATCAGTCTTACTCCGAATACCTGAAAGACTCTCTGGGTAAAT 726  
DB 3235 GTATCTTCACTATATGGATTCAATCACTACAAATCTTTTAAAGATTTTGGGGGAAT 3294  
QY 727 CCCTGATGTACAAACAATACTATATGTTCAATGCTGTGTGTGTGTGTGTGTGTGTGTGT 786  
DB 3295 CCCTTAAGATAGATACAAATCTACTCTGTTTAAATCAAGGTATGCAAAATATCTATATA 3354  
QY 787 AAATCTGAAGAAAGACTCTCCGGTGTGGTGAATCCTGACTCTGTTCCAAATAACAACAGAAC 846

DB 3355 AAGTATTATTAGTAAGCTTCTATGGGGAACCTGCACCAAGTACAAACCTTTAATAA---- 3410  
QY 847 TCTAAATACATCAACTACCGCGACCTGTACATCGGTGAAAAGTTTCATCATCCGTCGCCAAA 906  
DB 3411 --TGCAGCAATAAATATCAAAATTTATATCTCTGGTTTACGATTTATTTATAAAAAAGCA 3468  
QY 907 TCTAACTCTCAGTCCATCAATGATGAC---ATCGTACGTAAGAAGACTACATCTACCTG 963  
DB 3469 TCAATCTCGGAATATAAATAATGATAATATAGTCAGAGAAGGAGATTATATATATCTT 3528  
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QY 1021 GAAGAAGAAAGCTTTTCCCTGGCTCCGATCTCTGATCCGCAACTCTACACACCATC 1080  
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QY 1141 GAAGAATCTACTGACGAATCGGTCTGATCGGTATCCACCGTTTCTACGAATCTGGTATC 1200  
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QY 1201 GTATTCGAAGATACAAAGACTACTTCTGATCTTCCAAATGGTACCTGAAGGAAAGTAAA 1260  
DB 3763 GTTTGGGATACCTATGATTAATTTTTCATTAAGTCAGTGTATCTCAGAAAGATATCT 3822  
QY 1261 CGCAACCGTACACCTGAACTCGGTGCAATTTGCGAGTTCCCGAAAGACGAGGT 1320  
DB 3823 GAAATATAAATAATTAAGTTGGGATTAATGGCAATTCATTCCTCGGTGATGAAGGA 3882  
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DB 3883 TGGACAGAATA 3893

RESULT 10  
US-09-350-756-4  
; Sequence 4, Application US/09350756  
; Patent No. US20020034521A1  
; GENERAL INFORMATION:  
; APPLICANT: U. S. Army Medical Research Institute for Infectious Diseases  
; APPLICANT: John S. Lee  
; APPLICANT: Peter. Pushko  
; APPLICANT: Michael D. Parker  
; APPLICANT: Jonathan F. Smith  
; APPLICANT: Mark T. Dertzbaugh  
; APPLICANT: Leonard Smith  
; TITLE OF INVENTION: Botulinum Neurotoxin Vaccine  
; FILE REFERENCE: 003/124/SAP RIID 98-21  
; CURRENT APPLICATION NUMBER: US/09/350,756  
; CURRENT FILING DATE: 1999-07-09  
; EARLIER APPLICATION NUMBER: US 60/092,416  
; EARLIER FILING DATE: 1998-07-10  
; NUMBER OF SEQ ID NOS: 11  
; SOFTWARE: Apple Macintosh Microsoft Word 6.0  
; SEQ ID NO 4  
; LENGTH: 1400  
; TYPE: DNA  
; ORGANISM: Artificial  
; FEATURE:  
; OTHER INFORMATION: /note="synthetic sequence encoding botulinum neurotoxin"  
US-09-350-756-4

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Best Local Similarity 54.58; Pred. No. 1e-35;  
Matches 438; Conservative 0; Mismatches 345; Indels 21; Gaps 5;  
QY 15 CAACAATACAAATTCGGAATCTCTGACAAATATCATCCTGAACTCGTTACAAAGACAA 74

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120 CAACAAGTCTTCAAGAGAAATTAAGTCTTCCGGTTTAAACATGAGATACAAAGATGA 179
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; SEQ ID NO 9
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; TYPE: DNA
; ORGANISM: Clostridium botulinum
; FEATURE:
US-09-350-756-9

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Best Local Similarity 50.2%; Pred. No. 3.3e-25;
Matches 396; Conservative 0; Mismatches 375; Indels 18; Gaps 3;

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QY 80 TGATCGATCTCTGTTAGGGTCTAA-----GTGAAGTATACGAGGGTGTGAAC 133
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QY 134 TGAATGACAAACAGTTCAAACTGACCTCTCCGTAACCTCTAAGATCCGTTTACTC 193
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QY 194 AGAATCAGAACATCATCTTCAACTCCGTATTCCTGGACTCTCTGTTCTCTGTTCTGATTC 253
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QY 254 GTATCCGAAATACAGAACGCGGTATCCAGATTAATCAATCCCAATGAATACACCATCA 313
DB 269 GAATCTCTTAAGTATTTTAAACAGTATAAGTCTAAAT-----AATGAATATACAAATA 319
QY 314 TCAATCGATCAAGAATAAATCAATCTGTTGGAAAGTCTCCATCCGCGGTAAACCGTATCATCT 373
DB 320 TAATTTGATGAAATAATTTTCAAGATGGAAAGTATCACTTAATTTATGTTGAATAATCT 379
QY 374 GATCTCTGATGATATCAACGCTGAAGACCAATCTGATTTCTTCGAATACAAATCCGTCG 433
DB 380 GATCTTTACAGGATCTCAGGAAATAAACAAGAGTAGTATTTTAAATACAGTCAAAATGA 439
QY 434 AAGACATCTCTGAATATACATCAATCGCTGGTCTTCTGTTTACCATCAACCAATAA---CCTGA 490
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QY 491 ACAATGCTAAATCTACATCAACGCTAACTGGAATCTATATACCGACATCAAGACATCC 550
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QY 671 AAGAAGGTACAAAGATCCAGTCTTACTCCGAATACCTGAAAGACTTCTGGGGTAAATCCGC 730
DB 680 AAGATTTATCATTAATCAATCAATTAATCAATTAATCAATTAATCAATTAATCAATTAAT 739
QY 731 TGATGTACAAAGAAATATCTATATGTTCAATGCTGGTGAACAAAGAACTCTTACATCAAC 790
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DB 800 TAAATAATG 808

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RESULT 12
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US-09-350-756-9
; Sequence 9, Application US/09350756
; Patent No. US20020034521A1
; GENERAL INFORMATION:
; APPLICANT: U.S. Army Medical Research Institute for Infectious Diseases
; APPLICANT: John S. Lee
; APPLICANT: Peter Pushko
; APPLICANT: Michael D. Parker
; APPLICANT: Jonathan F. Smith
; APPLICANT: Mark T. Dertzbaugh
; APPLICANT: Leonard Smith
; TITLE OF INVENTION: Botulinum Neurotoxin Vaccine
; FILE REFERENCE: 003/124/SAP Riid 98-21
; CURRENT APPLICATION NUMBER: US/09/350,756
; EARLIER FILING DATE: 1999-07-09
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; GENERAL INFORMATION:			
; APPLICANT: U.S. Army Medical Research Institute for Infectious Diseases			
; APPLICANT: John S. Lee			
; APPLICANT: Peter Pushko			
; APPLICANT: Michael D. Parker			
; APPLICANT: Jonathan F. Smith			
; APPLICANT: Mark T. Dertzbaugh			
; APPLICANT: Leonard Smith			
; TITLE OF INVENTION: Botulinum Neurotoxin Vaccine			
; FILE REFERENCE: 003/124/SAP RIID 98-21			
; CURRENT APPLICATION NUMBER: US/09/350,756			
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; EARLIER FILING DATE: 1998-07-10			
; NUMBER OF SEQ ID NOS: 11			
; SOFTWARE: Apple Macintosh Microsoft Word 6.0			
; SEQ ID NO 7			
; LENGTH: 2452			
; TYPE: DNA			
; ORGANISM: Clostridium botulinum			
; FEATURE:			
US-09-350-756-7			
Query Match 7.9%; Score 105.8; DB 10; Length 2452;			
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Matches 394; Conservative 0; Mismatches 367; Indels 28; Gaps			
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Db	1294	CAATAGATAAAATCAAAATCAATATTTAATTTAGAAAGTACTGAAATTTGAGGTAAITTT	1353

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253 194 AGAATCAGACATCATCTTCAACCGCTATTCTCGGACTTCTCTGTTTCTCTTCTGGATTC
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268 1755 GATATATTGGATAAATATTTTAACTTTTGTATAGGAATTAATGAAAGAAATCA
269 671 AAGACGGGTACAAGATCCAGTCTTACTCCGAAATACCTGAAAGACTTCTGGGGTAATCCGC
270 1815 AAGATTTATATGATAATCAATCAATTCAGGTATTTTAAAGACTTTTGGGGTGAATAT
271 731 TGATGTACAACAAGAAATACATATATGTTTCAATGCTGTGTAACAGAACTTTACATCAAAC
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273 791 TCAAGAAAG 799
274 1935 TAAATAATG 1943

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Search completed: November 1, 2002, 08:17:24  
 Job time : 87 secs

GenCore version 5.1.3  
Copyright (c) 1993 - 2002 CompuGen Ltd.

OW nucleic - nucleic search, using sw model

Run on: November 1, 2002, 06:20:38 ; Search time 3271 Seconds  
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Title: US-09-910-186A-7

Perfect score: 1341

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Total number of hits satisfying chosen parameters:

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Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

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- 44: /cgn2\_6/ptodata/1/pna/US6000\_COMB.seq.\*
- 45: /cgn2\_6/ptodata/1/pna/US6001\_COMB.seq.\*
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- 49: /cgn2\_6/ptodata/1/pna/US6005\_COMB.seq.\*
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- 55: /cgn2\_6/ptodata/1/pna/US6011\_COMB.seq.\*
- 56: /cgn2\_6/ptodata/1/pna/US6012\_COMB.seq.\*
- 57: /cgn2\_6/ptodata/1/pna/US6013\_COMB.seq.\*
- 58: /cgn2\_6/ptodata/1/pna/US6014\_COMB.seq.\*
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- 80: /cgn2\_6/ptodata/1/pna/US6036\_COMB.seq.\*
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- 82: /cgn2\_6/ptodata/1/pna/US6038\_COMB.seq.\*
- 83: /cgn2\_6/ptodata/1/pna/US6039\_COMB.seq.\*
- 84: /cgn2\_6/ptodata/1/pna/US6040\_COMB.seq.\*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	1341	100.0	1341	34	US-09-910-186A-7
2	1339.4	99.9	1341	17	US-09-350-756-2
3	1339.4	99.9	1341	23	US-09-611-419A-7
4	1324.4	98.8	1348	23	US-09-611-419A-39
5	1319.4	98.4	1351	5	US-08-123-975A-6
6	741.2	55.3	1547	1	PCT-US97-15394-45
7	741.2	55.3	1547	11	US-08-704-159-45
8	741.2	55.3	1547	43	US-10-271-012-45
9	741.2	55.3	3876	1	PCT-US97-15394-41
10	741.2	55.3	3876	11	US-08-704-159-41
11	741.2	55.3	3876	43	US-10-271-012-41
12	736	54.9	3876	29	US-09-720-237-3
13	736	54.9	3876	39	US-10-051-952-3
14	663.4	49.5	4051	21	US-09-547-188-3
15	662.8	49.4	1526	1	PCT-US97-15394-43
16	662.8	49.4	1526	11	US-08-704-159-43
17	662.8	49.4	1526	43	US-10-271-012-43
18	661.8	49.4	3876	1	PCT-US97-15394-39
19	661.8	49.4	3876	11	US-08-704-159-39
20	661.8	49.4	3876	42	US-10-205-516-3
21	661.8	49.4	3876	43	US-10-271-012-39

22 660.2 49.2 3906 42 US-10-205-515-17 Sequence 17, Appl  
23 657 49.0 3876 39 US-09-730-237-2 Sequence 2, Appl  
24 657 49.0 3876 39 US-10-051-952-2 Sequence 2, Appl  
25 522.4 39.0 3509 42 US-10-241-596-19 Sequence 19, Appl  
26 426.8 31.8 1368 23 US-09-611-419A-17 Sequence 17, Appl  
27 426.8 31.8 1368 34 US-09-910-186A-17 Sequence 17, Appl  
28 417 31.1 1347 17 US-09-350-756-6 Sequence 6, Appl  
29 263 19.6 1323 23 US-09-611-419A-3 Sequence 3, Appl  
30 263 19.6 1323 34 US-09-910-186A-3 Sequence 3, Appl  
31 263 19.6 1326 23 US-09-611-419A-5 Sequence 5, Appl  
32 263 19.6 1326 34 US-09-910-186A-5 Sequence 5, Appl  
33 263 19.6 1330 1 PCT-US97-15394-22 Sequence 22, Appl  
34 263 19.6 1330 8 US-08-405-496-22 Sequence 22, Appl  
35 263 19.6 1330 8 US-08-422-711-22 Sequence 22, Appl  
36 263 19.6 1330 8 US-08-480-604-22 Sequence 22, Appl  
37 263 19.6 1330 11 US-08-704-159-22 Sequence 22, Appl  
38 263 19.6 1330 14 US-09-084-517-22 Sequence 22, Appl  
39 263 19.6 1330 43 US-10-271-012-22 Sequence 22, Appl  
40 263 19.6 1332 23 US-09-611-419A-1 Sequence 1, Appl  
41 263 19.6 1332 34 US-09-910-186A-1 Sequence 1, Appl  
42 263 19.6 1338 5 US-08-123-975A-1 Sequence 1, Appl  
43 263 19.6 1338 5 US-08-123-975A-4 Sequence 4, Appl  
44 263 19.6 1338 17 US-09-350-756-1 Sequence 1, Appl  
45 263 19.6 1338 23 US-09-611-419A-37 Sequence 37, Appl

ALIGNMENTS

Result 1  
US-910-186A-7  
Sequence 7, Application US/09910186A  
GENERAL INFORMATION:  
APPLICANT: U.S. Army Medical Research & Materiel Command  
TITLE OF INVENTION: RECOMBINANT VACCINE AGAINST BOTULINUM  
FILE OF INVENTION: NEUROTOXIN  
PCT REFERENCE: A33626-A 067252, 0107  
CURRENT APPLICATION NUMBER: US/09/910,186A  
PRIOR FILING DATE: 2001-07-20  
CURRENT FILING DATE: 2000-05-12  
PRIOR APPLICATION NUMBER: PCT/US00/12890  
PRIOR FILING DATE: 2000-05-12  
PRIOR APPLICATION NUMBER: 09/611,419  
PRIOR FILING DATE: 2000-07-06  
PRIOR APPLICATION NUMBER: 60/133,865  
PRIOR FILING DATE: 1999-05-12  
PRIOR APPLICATION NUMBER: 60/133,866  
PRIOR FILING DATE: 1999-05-12  
PRIOR APPLICATION NUMBER: 60/133,867  
PRIOR FILING DATE: 1999-05-12  
PRIOR APPLICATION NUMBER: 60/133,868  
PRIOR FILING DATE: 1999-05-12  
PRIOR APPLICATION NUMBER: 60/133,869  
PRIOR FILING DATE: 1999-05-12  
PRIOR APPLICATION NUMBER: 60/133,873  
PRIOR FILING DATE: 1999-05-12  
PRIOR APPLICATION NUMBER: 08/123,975  
PRIOR FILING DATE: 1993-09-21  
NUMBER OF SEQ ID NOS: 34  
SOFTWARE: FastSeq for Windows Version 4.0  
SEQ ID NO 7  
LENGTH: 1341  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Synthetic construct based on Clostridium botulinum  
OTHER INFORMATION: sequence  
NAME/KEY: CDS  
LOCATION: (10)...(1329)  
US-09-910-186A-7

Query Match 100.0%; Score 1341; DB 34; Length 1341;  
Best Local Similarity 100.0%; Pred. No. 0;  
Matches 1341; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 61 CGTTACAAAGACAAATCTGATCGATCTCTCTGGTTACGGTCTAAAGTTGAAGTATAC 120  
DB 61 CGTTACAAAGACAAATCTGATCGATCTCTCTGGTTACGGTCTAAAGTTGAAGTATAC 120  
QY 121 GACGGTGTGAATGAATGACAGAACCAAGTTCAAAGTACCTTCCTCGCTACTCTAAG 180  
DB 121 GACGGTGTGAATGAATGACAGAACCAAGTTCAAAGTACCTTCCTCGCTACTCTAAG 180  
QY 181 ATCCGTGTACTCAGATCAGAACATCATCTTCAACTCCGATTTCTTGGACTTCTCTGTT 240  
DB 181 ATCCGTGTACTCAGATCAGAACATCATCTTCAACTCCGATTTCTTGGACTTCTCTGTT 240  
QY 241 TCCTTCGTGATTCCTCCGAAATACAGAACGAGGTATCCAGAAATACATCCACAT 300  
DB 241 TCCTTCGTGATTCCTCCGAAATACAGAACGAGGTATCCAGAAATACATCCACAT 300  
QY 301 GAATACACCATCATCACTGCATGAAGAATAAATCTGTTGGAGATCTCCATCCCGGT 360  
DB 301 GAATACACCATCATCACTGCATGAAGAATAAATCTGTTGGAGATCTCCATCCCGGT 360  
QY 361 AACCGTATCATCTGGACTCTGATCGATATCAACGGTAAGACCAAAATCTGATTTCTTCGAA 420  
DB 361 AACCGTATCATCTGGACTCTGATCGATATCAACGGTAAGACCAAAATCTGATTTCTTCGAA 420  
QY 421 TACACATCCGTGAAGACATCTCTGAATACATCAATCGCTGGTTCCTTCGTACCATCACC 480  
DB 421 TACACATCCGTGAAGACATCTCTGAATACATCAATCGCTGGTTCCTTCGTACCATCACC 480  
QY 481 AATAACCTGAACATGCTAAATCTATCAACGCTAAATCTTCAAACTGGACGGTGACATC 540  
DB 481 AATAACCTGAACATGCTAAATCTATCAACGCTAAATCTTCAAACTGGACGGTGACATC 540  
QY 541 AAAGACATCCGTGAAGTATCGTAAACGGTGAATATCTTCAAACTGGACGGTGACATC 600  
DB 541 AAAGACATCCGTGAAGTATCGTAAACGGTGAATATCTTCAAACTGGACGGTGACATC 600  
QY 601 GATCGTACCACTGATCTGGATGAATATCTTCCATCTTCAACACCGGAACTGTCTCAG 660  
DB 601 GATCGTACCACTGATCTGGATGAATATCTTCCATCTTCAACACCGGAACTGTCTCAG 660  
QY 661 TCCATATCGAAGACGGTACAGATCCAGTCTTACTCCGAATACCTGAAAGACTTCTCG 720  
DB 661 TCCATATCGAAGACGGTACAGATCCAGTCTTACTCCGAATACCTGAAAGACTTCTCG 720  
QY 721 GGTAAATCCGCTGATGTACAAACAAAGATATATGTTCAATGCTGGTGAACAGAACTCT 780  
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QY 781 TACATCAACTGAAGAAAGACTCTCCGGTTGGTGAATCTTCACTGCTTCCAATACAAC 840  
DB 781 TACATCAACTGAAGAAAGACTCTCCGGTTGGTGAATCTTCACTGCTTCCAATACAAC 840  
QY 841 CAGAACTCTAAATATACATCAACTACCGGACCTGTACATCCGGTGAAGAACTCATCCGT 900  
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DB 961 CTGGACTTCTTCAACCTGAATCAGGAATGGCGTGTATACACTACAAGTACTTCAAGAA 1020  
QY 1021 GAAGAGAAAGAACTTTCTCGCTCCGATCTCTGATTCGACGACACTCTACACACCATC 1080  
DB 1021 GAAGAGAAAGAACTTTCTCGCTCCGATCTCTGATTCGACGACACTCTACACACCATC 1080

Copied from 109-10186 on 05-05 due to Res 2004

### RESULT 3





STATE: Maryland  
COUNTRY: USA  
ZIP: 21702-5012  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent in Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/123,975A  
FILING DATE: 21-SEP-1993  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: Hendricks, Glenna  
REGISTRATION NUMBER: 32,535  
REFERENCE/DOCKET NUMBER: mid.1  
TELEPHONE: (301) 619-2065  
TELEFAX: (301) 619-7714  
INFORMATION FOR SEQ ID NO: 6:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 1351 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: unknown  
MOLECULE TYPE: DNA (genomic)  
HYPOTHETICAL: NO  
ANTI-SENSE: NO  
ORIGINAL SOURCE:  
ORGANISM: Clostridium botulinum  
us-123-975A-6

Query Match 98.4%; Score 1319.4; DB 5; Length 1351;  
Local Similarity 99.9%; Pred. No. 0;  
Matches 1320; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
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9 CAACAATCAATTCGAAATCCTCGAATATATCATCTGAACTCGGTACAAAGACAA 68  
75 CAATCGATCGATCTGTCGTTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 134  
69 CAATCGATCGATCTGTCGTTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 128  
135 GAATGACAGAACCAAGTTCAAATGACCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 194  
129 GAATGACAGAACCAAGTTCAAATGACCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 188  
195 GAATGACAGAACCAAGTTCAAATGACCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 254  
189 GAATGACAGAACCAAGTTCAAATGACCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 248  
255 TATCCGGAATACAGAACGAGCGGTATCCAGAAATACATCCAGAAATACATCCATCAT 314  
249 TATCCGGAATACAGAACGAGCGGTATCCAGAAATACATCCAGAAATACATCCATCAT 308  
315 CAATCGATGAGAAATACATCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 374  
309 CAATCGATGAGAAATACATCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 368  
375 GACTCTGATCGATATCAACGCTGAGAACCAATCTGCTGCTGCTGCTGCTGCTGCTG 434  
369 GACTCTGATCGATATCAACGCTGAGAACCAATCTGCTGCTGCTGCTGCTGCTGCTG 428  
435 AGACATCTCTGAATACATCAATCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 494  
429 AGACATCTCTGAATACATCAATCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 488  
495 TGCTAAATCTACATCAACGCTGAGAAATCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 554  
489 TGCTAAATCTACATCAACGCTGAGAAATCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 548  
555 AGTATCGCTAAGGCTGAAATCATCTTCAACATGGACGGTGACATCGATCGTACCCAGTT 614

Db 549 AGTTATCGCTAAGGCTGAAATCATCTTCAAACTGGAGGCTGACATCGTATCCAGTT 608  
QY 615 CATCTGGATGAATACTTCTCCATCTTCAACACGAACTGCTCAGTCCAAATATCGAAGA 674  
Db 609 CATCTGGATGAATACTTCTCCATCTTCAACACGAACTGCTCAGTCCAAATATCGAAGA 668  
QY 675 AGGTGACAAAGTCCAGTCTTACTCCGAATACCTGAAAGACTTCTGGGGTAAATCGGCTGAT 734  
Db 669 AGGTGACAAAGTCCAGTCTTACTCCGAATACCTGAAAGACTTCTGGGGTAAATCGGCTGAT 728  
QY 735 GTACAAACAAAGTACTATATGTTCAATGCTGTAACAAAGTCTTACATCAATCAATGAA 794  
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QY 795 GAAGACTCTCGGTTGGTGAATCTGACTTCCAAATACCAACAGAACTCTAAATA 854  
Db 789 GAAGACTCTCGGTTGGTGAATCTGACTTCCAAATACCAACAGAACTCTAAATA 848  
QY 855 CATCAACTACCGGACCTGATACCTGCTGTAACAAAGTCTTACATCAATCAATGAA 914  
Db 849 CATCAACTACCGGACCTGATACCTGCTGTAACAAAGTCTTACATCAATCAATGAA 908  
QY 915 TCAGTCCATCAATGATGACATCGTACCTTAAAGAACTACATCTACCTGGACTTCTTCAA 974  
Db 909 TCAGTCCATCAATGATGACATCGTACCTTAAAGAACTACATCTACCTGGACTTCTTCAA 968  
QY 975 CCGTAATCAGGAATGCGGCTGATACCTTCAAGAAAGTCTTCAAGAAAGTCTTCAAGAA 1034  
Db 969 CCGTAATCAGGAATGCGGCTGATACCTTCAAGAAAGTCTTCAAGAAAGTCTTCAAGAA 1028  
QY 1035 TTTCCTGCTCGATCTCTGATCTCCGACGAACTCTACAAACATCCAGATCAAGAAATA 1094  
Db 1029 TTTCCTGCTCGATCTCTGATCTCCGACGAACTCTACAAACATCCAGATCAAGAAATA 1088  
QY 1095 CGACGAAACAGCGGACCTTCTTCCAGCTGCTGCTTCAAGAAAGTCTTCAAGAAAGTCTTCA 1154  
Db 1089 CGACGAAACAGCGGACCTTCTTCCAGCTGCTGCTTCAAGAAAGTCTTCAAGAAAGTCTTCA 1148  
QY 1155 CGAAATCGCTCTGATCGGTATCCACCGTTTCTAGCAATCTGCTGATCTTCAAGAAATA 1214  
Db 1149 CGAAATCGCTCTGATCGGTATCCACCGTTTCTAGCAATCTGCTGATCTTCAAGAAATA 1208  
QY 1215 CAAGACTACTTCTGATCTGCAATCTGCAATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1274  
Db 1209 CAAGACTACTTCTGATCTGCAATCTGCAATGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1268  
QY 1275 CCGTAATCGGTTGCAATCTGCGAGTTTCCATCCGAAAGTCTTCAAGAAAGTCTTCAAGAA 1334  
Db 1269 CCGTAATCGGTTGCAATCTGCGAGTTTCCATCCGAAAGTCTTCAAGAAAGTCTTCAAGAA 1328  
QY 1335 A 1335  
Db 1329 A 1329

RESULT 6  
PCT-US97-15394-45  
Sequence 45, Application PC/TUS9715394  
GENERAL INFORMATION:  
APPLICANT: Williams, James A.  
APPLICANT: Thalley, Bruce S.  
TITLE OF INVENTION: Multivalent Vaccine for Clostridium  
TITLE OF INVENTION: Botulinum Neurotoxin  
NUMBER OF SEQUENCES: 82  
CORRESPONDENCE ADDRESS:  
ADDRESS: Medlen & Carroll  
CITY: San Francisco  
STATE: California  
COUNTRY: United States of America  
ZIP: 94104  
COMPUTER READABLE FORM:



MEDIUM TYPE: Floppy disk  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: PatentIn Release #1.0, Version #1.30  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: PCT/US97/15394  
 FILING DATE:  
 CLASSIFICATION:  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Ingollia, Diane E.  
 REGISTRATION NUMBER: 40,027  
 REFERENCE/DOCKET NUMBER: OPHD-02304  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: (415) 705-8410  
 TELEFAX: (415) 397-8338  
 INFORMATION FOR SEQ ID NO: 45:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 1547 base pairs  
 TYPE: nucleic acid  
 STRANDEDNESS: double  
 TOPOLOGY: linear  
 MOLECULE TYPE: DNA (genomic)  
 FEATURE:  
 NAME/KEY: CDS  
 LOCATION: 108..1523  
 US97-15394-45

Very Match 55.3%; Score 741.2; DB 1: Length 1547;  
 Best Local Similarity 72.5%; Pred No. 8,3e-194;  
 Matches 959; Conservative 0; Mismatches 363; Indels 0; Gaps 0;

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204 ATGTTTAAATATATATACGAAATTTTAAATATATATATCTTAAATTAAGATATAAG 263

70 GACAAACATCTGATCGATCTGCTGTTAGTGGTAAAGTTAGTACATACGACGGTGT 129

264 GAT 323

130 GAATGATGACGAAACAGGTTTAACTGACCTCTTCGGTAACTTAAAGATCGGTGTT 189

324 GAGCTTAATGATATAATCAATTTAAATTAATTAATTAATTAATTAATTAATTAATTAAT 383

190 ACTCAGATCAGAACATCTCTCACTCCGATCCGATCCGATCCGATCCGATCCGATCCGAT 249

384 ACTCAAACTCAGAAAT 443

250 ATTCTGATCCGAAATACAGAACGACGATCCGATCCGATCCGATCCGATCCGATCCGAT 309

444 ATAAGAATACCTAAATATAAGAAATATATATATATATATATATATATATATATATATAT 503

310 ATATCAACTGCAATGAGATATATCTGTTGGAAGATCTCCGATCCGATCCGATCCGATCCG 369

504 ATATTAATGTAAGAAATATATATGCGCTGGAATATATATATATATATATATATATATAT 563

370 ATCTGCACTGATCATATCAACGGTAAAGCAATCTGATCTTCTCGAATACAAATC 429

564 ATATGACATTAATTCAT 623

430 CGTGAGACATCTCTGAAATACATCAATCGCTGGTTCCTGTTTACATCAACAAATCAACTG 489

624 AGAAGATATATATCAGAT 683

490 AACAACTGCTAAATATACATCAACGGTAAAGCAATCTATATACGATCAAGACATC 549

684 AATACGCTAAATTTAT 743

550 CGTGAAGTTATCCGTAACGGTAAATATCTTCAACGTAAGGATGATCGATCGATCGATCG 609

744 AGAAGATTTATCTGTAATGTAAGAAATATATATATATATATATATATATATATATATAT 803

610 CAGTTATCTGGAATGAATATCTTCCATCTTCAACGCGATCTCTCAGTCCCAATATC 669

Db 804 CAATTATTTGGATGAANAATATTTTCACTATTTTAAATACGGAATTAAGTCAATCAAAATAT 863

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Db 1104 AATTCATCTATATAATGATGATATAGTTAGAAAGAGATTTATATATATCTAGATTTT 1163

QY 970 TTCAACCTGAATCAGGAATGGGCTGTATACACTACAAGTACTTCAAGAAAGAAAGAA 1029

Db 1164 TTTAATTTAAATCAAGAGTCGAGAGTATATACCTATATAATATTTTAAAGAAAGAGAA 1223

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QY 1090 GAATAGCAGAAACAGCCGACCTACTTCTCCAGCTGCTGTTTCAAGAAAGATGAAGAATCT 1149

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QY 1210 GAATACAAAGACTACTTCTGATCTCCAAATGCTACCTGAAAGAGTTTAAACGCAACCG 1269

Db 1404 GAGTATAAGATATATTTTGTATAAGTAAATGTTACTTAAAGAGGTTAAAGGAAACCA 1463

QY 1270 TACAACCTCAAACTGGGTGCAATGGCAGTTCATCCGAAAGACGAGGTTGGACCGAA 1329

Db 1464 TATAATTTAAATTTGGGATGTAATTTGGCAGTTTATTTCTTAAAGATGAAGGTTGACTGAA 1523

QY 1330 TA 1331

Db 1524 TA 1525

# RESULT 7

US-08-704-159-45

; Sequence 45, Application US/08704159

; GENERAL INFORMATION:

; APPLICANT: Williams, James A.

; APPLICANT: Thalley, Bruce S.

; TITLE OF INVENTION: Multivalent Vaccine For Clostridium

; TITLE OF INVENTION: Botulinum Neurotoxin

; NUMBER OF SEQUENCES: 82

; CORRESPONDENCE ADDRESS:

; ADDRESSEE: Medien & Carroll

; STREET: 220 Montgomery Street, Suite 2200

; CITY: San Francisco

; STATE: California

; COUNTRY: United States of America

; ZIP: 94104

; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk

; COMPUTER: IBM PC compatible

; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:



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1  RESULT 9
2  PCT-US97-15394-41
3  ; Sequence 41, Application PC/TUS9715394
4  ; GENERAL INFORMATION:
5  ; APPLICANT: Williams, James A.
6  ; APPLICANT: Thalley, Bruce S.
7  ; TITLE OF INVENTION: Multivalent Vaccine For Clostridium
8  ; TITLE OF INVENTION: Botulinum Neurotoxin
9  ; NUMBER OF SEQUENCES: 82
10 ; CORRESPONDENCE ADDRESS:
11 ; ADDRESSEE: Medlen & Carroll
12 ; STREET: 220 Montgomery Street, Suite 2200
13 ; CITY: San Francisco
14 ; STATE: California
15 ; COUNTRY: United States of America
16 ; ZIP: 94104
17 ; COMPUTER READABLE FORM:
18 ; MEDIUM TYPE: Floppy disk
19 ; COMPUTER: IBM PC compatible
20 ; OPERATING SYSTEM: PC-DOS/MS-DOS
21 ; SOFTWARE: Patent In Release #1.0, Version #1.30
22 ; CURRENT APPLICATION DATA:
23 ; APPLICATION NUMBER: PCT/US97/15394
24 ; FILING DATE:
25 ; CLASSIFICATION:
26 ; ATTORNEY/AGENT INFORMATION:
27 ; NAME: Ingolia, Diane E.
28 ; REGISTRATION NUMBER: 40,027

```

NAME: Ingolia, Diane E.  
REGISTRATION NUMBER: 10 027

864 GAAGCAAGATATATAAAATTC AATCATATAGCGGAATATTTAAAGATTTTGGGGAATCCT 923

REFERENCE/DOCKET NUMBER: OPHD-02304  
TELEPHONE: (415) 705-8410  
TELEFAX: (415) 397-8338  
INFORMATION FOR SEQ ID NO: 41:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 3876 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: double  
TOPOLOGY: linear  
MOLECULE TYPE: DNA (genomic)  
FEATURE:  
NAME/KEY: CDS  
LOCATION: 1..3873  
PCT-US97-15394-41

Query Match 55.3%; Score 741.2; DB 1; Length 3876;  
Best Local Similarity 72.5%; Pred. No. 1.3e-193;  
Matches 959; Conservative 0; Mismatches 363; Indels 0; Gaps 0;  
10 ATGGCCACAAATACAAATCCGAAATCCTGAACATATCATCTCCGACCTGGGTACAAA 69  
11 ATGTTAAATTAATTAATAGCAATTTTAAATATATATATCTTAAATTTAAGATATAG 2613  
70 GACAAATCTGATCGATCTGTCGGTTACGGTGCTAAAGTTGAAGTATACGAGGGTT 129  
2614 GATAATAATTTAATAGATTTATCAGGATATGGGCAAGGTAGAGGTATATGATGGATC 2673  
130 GAATCAATGACAAAGACAGTTCACAACTGACCTCTCCGCTAACTCTAAGATCCGGTT 189  
2674 GAGTTAATGATTAATTAATCAATTTAAATTAATCTAGTTCAGCAATATAGATAGAGTG 2733  
190 ACTGAGAACTGAGATCATCTCAACTCCGATATCTCGTGGACTCTCTGTTCTGTCGG 249  
2734 ACTCAAAATCAGAAATATCATATTTAATAGTGTGTCCTTGTATTTAGCGTTAGCTTTGG 2793  
250 ATTCGTATCCGAAATACAGAAAGACAGCTATCAGATTAATCATCCCAATGATACAC 309  
2794 ATGAATACCTTAATTAATGAAGATGATGGTATACAAATTAATTAATTAATGAATATACA 2853  
310 ATCATCACTGATGATGAAGATTAATCTCTGTTGGAGATCTCCATCCGCGGTAAACCGTATC 369  
2854 ATAATTAATTTGATGAAATTAATTCGGCTGGAATATCTATTAGGGTAAATAGGATA 2913  
370 ATCTGACCTGATCGATCATCAACGGTACAGCAATCTGATCTTCGATCAACATC 429  
2914 ATATGACCTTAATTTGATTAATTAATGAAATACCAATCCGTTATTTTGAATATAACATA 2973  
430 CGTGAAGACATCTCTGAATACATCAATCGCTGGTCTTCCTGTTACCATCAACAAATACCTG 489  
2974 AGAGAAGATATATCAGATATATAAATAGATGGTTTTTTGTAATTAATTAATTAATTTG 3033  
490 ACAATGCTAAATCTACATCAACGGTAACTGGAATCTAATACCGACATCAAGACATC 549  
3034 AATAACGCTAAATTTATATTAATGATGATGATGATGATGATGATGATGATGATGATGATGAT 3093  
550 CGTGAAGTATCTGATCAACGGTGAATATCTCTCAACTGGACGTGACATCGATCGTACC 609  
3094 AGAGAAGTATTTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 3153  
610 CAGTTCATCTGATGAATATCTTCCATCTTCAACACCGAACTGCTCAGTCCAAATATC 669  
3154 CAATTTATTTGGTGAATATTTTCAATCTGATTTTAAATGCGGAAATTAAGTCAATCAATATT 3213  
670 GAAGACGGTACAGATCAGTCTTACTCCGAAATACCTGGAAGACCTCTCGGGTAAATCCG 729  
3214 GAAGAAGATATAAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAATTAAT 3273  
730 CTGATGATCAACAAAGATATATATGTTCAATGTTGTTCAACAGAACTCTTACATCAAA 789  
3274 TTAATGATCAATAAAGATATATATGTTTAAATGCGGGAATTAATTAATTAATTAATTAATTAAT 3333  
790 CTGAAGAAAGACTCTCCGGTTGGTGAATCCCTGACTCTGCTTCCAAATACCAACCAAGACTCT 849

Db 3334 CTAAAGAAGATTACCTGTAGTGAATTTTACAGTGAGCAATATAATCAAAATCT 3393  
QY 850 AATACATCAACTCCGACCTCTCATCGGTGAAAGTTTCATCATCTCCCAATCT 909  
Db 3394 AATATATAAATTTATAGAGATTTATATTTGGAGAAAATTTTATTAAGAAAGTCA 3453  
QY 910 AACTCTCAGTCCATCAATGATGACATCGTAAAGAAAGACTACATCTACCTGGACTTC 969  
Db 3454 AATCTCAATCTAATATGATGATAGTAGAAGAAAGATATATATATATCTAGATTT 3513  
QY 970 TTCACCTGAATCAGGAATGCGGTGTATACACCTTACAGTACTTCAAGAAAGAGAGAA 1029  
Db 3514 TTTAATTTAAATCAAGAGTGGAGATATATACCTATAAATATTTTAAAGAAAGAGAGAA 3573  
QY 1030 RAGCTTTTCTGCTCCGATCTCTGATTCGAGCAACTCTACACACCATCCAGATCAAA 1089  
Db 3574 AATTTGTTTGTAGTCTCTAATGATTCGATGATGATGATGATGATGATGATGATGATGAT 3633  
QY 1090 GAATACGAGCAACGACCTACTCTTGGCAGCTGCTTCAAGAAAGATGAAGAAATCT 1149  
Db 3634 GAATATGATGAACGCCAATATAGTTGTCAGTTGCTTTTAAAGAAAGATGAAGAAAT 3693  
QY 1150 ACTGACGAATCGGTCTGATCGGTATCCACGGTTTCTACGAATCTGATCTGATTCGAA 1209  
Db 3694 ACTGATGATGAGGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 3753  
QY 1210 GAATACAAAGACTCTCTGATCTCCAAATGTTACCTGAGGAAAGTAAACCAACCG 1269  
Db 3754 GAGTAAAGATTTATTTGATTAAGTAAATGTTACTTAAAGAGGTAAAGAGGAAACCA 3813  
QY 1270 TACAACCTGAACCTGGGTGCAATGTCAGTTCATCCGAAAGACGAGGTGACCGAA 1329  
Db 3814 TATAATTTAAATTTGGGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 3873  
QY 1330 TA 1331  
Db 3874 TA 3875

RESULT 10  
US-08-704-159-41  
Sequence 41, Application US/08704159  
GENERAL INFORMATION:  
APPLICANT: Williams, James A.  
APPLICANT: Thalley, Bruce S.  
TITLE OF INVENTION: Multivalent Vaccine For Clostridium  
NUMBER OF SEQUENCES: 82  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Medlen & Carroll  
STREET: 220 Montgomery Street, Suite 2200  
CITY: San Francisco  
STATE: California  
COUNTRY: United States of America  
ZIP: 94104  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent In Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08704,159  
FILING DATE:  
CLASSIFICATION: 424  
ATTORNEY/AGENT INFORMATION:  
NAME: Ingolia, Diane E.  
REGISTRATION NUMBER: 40,027  
REFERENCE/DOCKET NUMBER: OPHD-02304  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 705-8410  
TELEFAX: (415) 397-8338  
INFORMATION FOR SEQ ID NO: 41:

SEQUENCE CHARACTERISTICS:  
LENGTH: 3876 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: double  
TOPOLOGY: linear  
MOLECULE TYPE: DNA (genomic)  
FEATURE:  
NAME/KEY: CDS  
LOCATION: 1..3873  
US-08-704-159-41

Query Match 55.3%; Score 741.2; DB 11; Length 3876;  
Best Local Similarity 72.5%; Pred. No. 1.3e+193;  
Matches 959; Conservative 0; Mismatches 363; Indels 0; Gaps 0;

QY 10 ATGGCCACAAATCAATCCGAAATCTGCTGGTTACGGTGTCTAAAGTTGAAGTATACGACGGTGT 129  
DB 2554 ATGTTTAAATATAATTAAGGAAATTTAAATAATATATATCTTAAATTTAAGATATAAG 2613  
QY 70 GACAAATCTGATCGATCTGCTGGTTACGGTGTCTAAAGTTGAAGTATACGACGGTGT 129  
DB 2614 GATAATAATTTAATAGATTTATCAGGATATGGGCAAGGTAGAGTATATGATGGATC 2673  
QY 130 GAACATGATGACAAACACGATGTAACAGTACCTCTCCGCTAACTCTAAGATCCGGTGT 189  
DB 2674 GAGCTTAATGATAAAATCAATTTAAATTAATCTAGTTTCAGCAATAGTAAAGATTAGTG 2733  
QY 190 ACTCAGAAATCAGAAATCAATCTTCAACCTCGTATTCCTGGACTTCTCTGTTCTCTG 249  
DB 2734 ACTCAAAATCAGAAATCAATCTTAAATAGTGTCTGCTTTACGGTGTAGCTTTGG 2793  
QY 250 ATTCGATCCCGAAATACAAAGACGAGGTATCCAGAAATTAACATCCCAATGAATACAC 309  
DB 2794 ATAAGAATACCTAAATATAAGAAATGATGGTATACAAATATATATCAATGAATATACA 2853  
QY 310 ATCACTCACTGATCAGAAATCAATCTGTTGGAGATCTCCATCCCGGTAAACCGTATC 369  
DB 2854 ATAAATATGATGAAATTAATTCGGCTGGAATATCTATAGGGTAAATAGATA 2913  
QY 370 ATCTGACTCTGATCGATATCAAGCGGTAAAGACCAAAATCTGATTTCTCGAATACACATC 429  
DB 2914 ATATGACTTTAATGATATAAATGAAATGAAATGAAATGAAATGAAATGAAATGAAAT 2973  
QY 430 CGTGAAGATCTCTGAATACATCAATCGTGGTCTCTGTTTACCATCACCATACCTG 489  
DB 2974 AGAGAAGATATATCAGAGTATATAAATAGATGGTGTGTTGTAATATATCTAATAATTTG 3033  
QY 490 ACAAATGCTAAATCTACATCAACCGGTAAATCTGAATCTATATCCGACATCAAGACATC 549  
DB 3034 AATAAGCGTAAATTTATATTAATGTAAGCTAGATCAAAATACAGATATATAAGATATA 3093  
QY 550 CGUGAATGATCGCTAAGCGTAAATCAATCTTCAAACTGGAGCGGTGACATCGATCC 609  
DB 3094 AGAGAAGATATGCTAAGTGAATATAATATTAATTAAGTGTGATATAGATAGATAACA 3153  
QY 610 CAGTTCATCTGGATGAATATCTCTCCATCTTCAACACCGAATCTCTAGTCCAAATATC 669  
DB 3154 CAATTTATTTGGATGAATATTTTCAATTTTATACGGAAATTAAGTCATCAATATTT 3213  
QY 670 GAAGAACGTATCAAGATCCAGTCTTCTCCGAAATCACTGAAAGACTTCTGGGGTAAATCCG 729  
DB 3214 GAAGAAAGATATAAAATCAATCAATATAGCAATATTTAAAGATATTTTGGGGAATCCCT 3273  
QY 730 CTGATGTACAAAGAAATCAATATATATGTTCAATCTGTTGTAACAGAACTCTTACATCAA 789  
DB 3274 TTAATGTCAATTAAGAAATATATATGTTTAAATGGGGAATTAATATATATATAA 3333  
QY 790 CTGAAGAAAGACTCTCGGTTGGTGAATCTGACTCTGTTCCAAATCAACACCAAGACTCT 849  
DB 3334 CTAAGAAAGATCTACCTGTAGTGAATTTTAAACAGTACCAATATATCAAAATCT 3393  
QY 850 AATACATCAATCTACCGGAGCTGTACATCGTGAAGATTCATCTCCGTCGCAATCT 909

DB 3394 AAATATATAAATTTATAGAGATTTATATATTTGGAGAAAAATTTATTAAGAGAAAGTCA 3453  
QY 910 AACTCTCAGTCCATCAATGATGACATCGTAGCTAAAGAGACATCTACCTGGACTTC 969  
DB 3454 AATCTCAATCTATAAATGATGATATAGTTAGAAAAAGAGATTATATATATCTAGATTT 3513  
QY 970 TTCAACCTGAATCAGGAATGCGGTGATACACCTACAGTACTTCAAGAAAGAGAGAA 1029  
DB 3514 TTTAATTTAAATCAAGAGTGGAGAGTATATACCTATAAATTTTAAAGAAAGAGAGAA 3573  
QY 1030 AAGCTTTCCCTGGCTCCGATCTCTGATTCGAGCAACTCTACACCACTCCAGATCAAA 1089  
DB 3574 AAATGTTTGTAGTCCCTATTAAGTGAATTTCTGATGAGTTTACATACTACTACAAATAAA 3633  
QY 1090 GAATACGACGACACCCGACCTACTCTTCCAGCTGCTGTTCAAGAAAGATGAAGATCT 1149  
DB 3634 GAATATGATGACACGACCAACATATAGTTGTCAGTGTCTTTTAAAGAAAGATGAAGAA 3693  
QY 1150 ACTGACGAAATCGGTCTGATCGGTATCCACCGTTTCTACGAATCTGATTCGATTCGAA 1209  
DB 3694 ACTGATGATAGAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 3753  
QY 1210 GAATACAAAGACTACTTCTGATCTCCAAATGATGATGATGATGATGATGATGATGATG 1269  
DB 3754 GAGTATAAGATTTATTTGTTAAGTAAATGGTAAAGAGGTAAAGAGGTAAAGAGGTAA 3813  
QY 1270 TACAACCTGAACTGGGTGCAATTTGGCAGTTTCATCCGAAAGACGAAAGTTCGACCG 1329  
DB 3814 TATATTTAAATTTGGGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 3873  
QY 1330 TA 1331  
DB 3874 TA 3875

RESULT 11  
US-10-271-012-41  
; Sequence 41, Application US/10271012  
; GENERAL INFORMATION:  
; APPLICANT: Williams, James A.  
; Thalley, Bruce S.  
; TITLE OF INVENTION: Multivalent Vaccine For Clostridium  
; Botulinum Neurotoxin  
; NUMBER OF SEQUENCES: 82  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Medien & Carroll  
; STREET: 220 Montgomery Street, Suite 2200  
; CITY: San Francisco  
; STATE: California  
; COUNTRY: United States of America  
; ZIP: 94104  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent in Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/10/271.012  
; FILING DATE: 15-Oct-2002  
; CLASSIFICATION: <Unknown>  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US/08/704.159  
; FILING DATE: <Unknown>  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Ingolia, Diane E.  
; REGISTRATION NUMBER: 40,027  
; REFERENCE/DOCKET NUMBER: OPND-02304  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (415) 705-8410  
; TELEFAX: (415) 397-8338  
; INFORMATION FOR SEQ ID NO: 41:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 3876 base pairs

QY	910	AACTCTCAGTCCATCAATGATGACATCGTAGCTAAAGAAAGACTACATCTACCTGGACTTC	969
Db	3454	AAATTCTCAATCTATAAATGATGATATAGTAGAAAAGAAGATTATATATCTAGATTTT	3513
QY	970	TTCAACCTGAATCAGGAATGCGGTATACACCTACAAGTACTTCAAGAAAGAAGAA	1029
Db	3514	TTTAAATTTAAATCAAGAGTGAGAGATATACCTATAAATATTTTAAAGAAGAAGAA	3573
QY	1030	AAGCTTTTCCGTGCGCATCTCTGATTCGAGCAACTCTACAAACCACTCCAGATCAAA	1089
Db	3574	AAATTTGTTTTAGCTCCCTATTAAAGTGATCTGATGAGTTTTCAATACTATACAAATAAA	3633
QY	1090	GAATACGACGAACGCCGACCTACTCTTGCCAGCTGCTGTCAAGAAGATGAAGAATCT	1149
Db	3634	GAATATGATGAACGCCCAACATATAGTTGTCAGTTGCTTTTAAAAAAGATGAAGAAAGT	3693
QY	1150	ACTGACGAANTCGGTCATCGGTATCCACGGTTTCTACGAATCTGATCGTATTTCGAA	1209
Db	3694	ACTGATGAGTAGGATTGATTTGGTATATCATGCTTTTCAAGAACTGGAATGTATTGAA	3753
QY	1210	GAATACAAAGACTACTTCTGCACTCCAAATGGTACCTGAAGGAAGTTAAACGCCAACCG	1269
Db	3754	GAGTATAAAGATTATTTTGTATAGTAAATGGTACTTAAAGAGGTATAAAGAGAACCA	3813
QY	1270	TACACCTGAACCTGGTTCGAATTTGCGAGTTTCATCCGAAAGACGAAGTTTCGACCGAA	1329
Db	3814	TATAATTTAAAATTTGGGATGTAATTGGCAGTTTATTCCTCAAGNCTGAAGCGTGGACTGAA	3873
QY	1330	TA	1331
Db	3874	TA	3875

3574	AAATTTGTTTTAGCTCCCTATTAAGTGAATCTGATGAGTTTTACAATACTATACAAATAAA	3633
1090	GAATACGCGAACAACGCCACTACTCTTCCGACGTGCTGTTCAAGAAGAATGAAGAATCT	1149
3634	GAATATGATGAACGCCACACATATAGTTGTACGTGTGTTTTAAAAAAGATGAAGAAAGT	3693
1150	ACTGACGAATCGGTCTGATCGGTATCCACCGTTTCTACGAATCTGATTCGTATTCCGAA	1209
3694	ACTGATGAGATAGGATTGATTGGTATTCAATCGTTTCTACGAATCTGGAATGTTATTGAA	3753
1210	GAATACAAAGACTACTCTCTGCATCTCCAAATGGTACCTGGAAGGAAGTTAAACGCCAACCG	1269
3754	GAGTATAAGATTATTTTGTATGAATGAATGGTACTATAAGAGCTATAAAGAGAAACCA	3813
1270	TACACCTGAAACTCGGTTGCAATTGGCAGTTTCATCCGAAAGACGNAGGTTTGGACCGAA	1329
3814	TATAATTTAAAAATTGGGATGTAATTGGCAGTTTATTCCTAAAGATGAAGGTGGACTGAA	3873
1330	TA	1331
3874	TA	3875

RESULT 12.  
 US-09-730-237-3  
 ; Sequence 3, Application US/09730237  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Walker, Patricia  
 ; TITLE OF INVENTION: Methods of Treating Hyperhidrosis  
 ; FILE REFERENCE: 2933  
 ; CURRENT APPLICATION NUMBER: US/09/730,237  
 ; CURRENT FILING DATE: 2000-12-05  
 ; NUMBER OF SEQ ID NOS: 12  
 ; SOFTWARE: PatentIn Ver. 2.1  
 ; SEQ ID NO 3  
 ; LENGTH: 3876  
 ; TYPE: DNA  
 ; ORGANISM: botulinum toxin  
 US-09-730-237-3

Query Match	54.9%	Score 736;	DB 29;	Length 3876;
Best Local Similarity	72.2%;	Pred. No. 3.4e-192;		
Matches 955;	Conservative 1;	Mismatches 366;	Indels 0;	Gaps
QY	10	ATGGCAACAATACAGATTCGGAATCTCGAACATATCATCTCGAACCTGCGTTACAAA	69	
Db	2554	ATGTTAAATATATAAATACGGAATTTTAAATATATATCTTAATTTAAGTATATAG	2613	
QY	70	GACACAAATCTGATCGATCTGCTGTTACGGTGTCTAAAGTTAAGTATACGACGGTGT	129	
Db	2614	GATATAATTTAATAGATTTATCAGGATATGGGCAAGGTAGAGGTATATGATGGAGTC	2673	
QY	130	GAACTGAATGACAGAAGCAACGATTCAACTGACCTCTTCGGCTAACTCTAAGATCCGTT	189	
Db	2674	GAGCTTAAATGATAAAATCAATTTAAATTAATAGTTCTCAGCAAAATAGTAAGATAGAGT	2733	
QY	190	ACTCAGAACTCAGAACATCATCTTCAACTCCGTTATCTCCGACTCTCTGTTTCTCTCTCG	249	
Db	2734	ACTCAAAATCAGAAATCATATATTTAATAGTGTGTCCTTGATTTACGGTTAGCTTTGG	2793	
QY	250	ATTCTGATCCCGAAATPACAAGAACGCGTATCCAGAAATTCATCCCAAGTAATACAC	309	

Db 2794 ATAAGAATACCTAAATATAGAATGATGGTATACAAATATATATTCATCAATCAATATACA 2853  
QY 310 ATCATCAACTGCGAAGAAATATACCTCTGTTGGAGAGACTCCATCCGGGTAACCGGTATC 369  
Db 2854 ATAATTAATTTGTAAGAAATATATCCGGCTGGAATATCTATTTAGGGGTAATAGGATA 2913  
QY 370 ATCTGGACTCTGATCGATCAACGGTAAGACCAATCTCTATCTTCCGAATCAACACATC 429  
Db 2914 ATATGGACITTAATTCATTAATGGAAGAAACCAATCGGTATTTTGAATATAACATA 2973  
QY 430 CGTGAAGACATCTCGAATACATCAATCCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 489  
Db 2974 AGAAGAGATATACAGAGTATATAAATAGATGCTTTTGTAACTATTACTAATATTTG 3033  
QY 490 AACAACTGCTAAATCTACATCAACGGTAACTGGAATCTTAATACCGACATCAAGACATC 549  
Db 3034 AATAACGCTAATATTTATTAATGCTAGCTAGATCAATACAGATATTAAAGATATA 3093  
QY 550 CGTGAAGTATTCCTCAACGGTGAATATCTTCAACACGGAGCGGTGACATCGATGCTACC 609  
Db 3094 AGAAGAGTATATCTAATGCTGAATATATTAATTAATGATGCTGATAGATAGATAACA 3153  
QY 610 CAGTTCATCTGGAATGAATCTCTCATCTTCAACACCGAATCTGCTCAGTCCGAATATC 669  
Db 3154 CAATTTATTTGGATGAATATTTCACTATTTTAAATACGGATTTAAGTCAATCAATATT 3213  
QY 670 GAAGACGGTACAGATCCGATCTTACTCCGAATACCTGAAAGCTTCTGGGTAATCCG 729  
Db 3214 GAAGAAAGATATAAATCAATCATATAGCGAATATTTAAAGATTTTGGGGAATCCT 3273  
QY 730 CTGATCTACAGAAAGATATATGTTCAATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 789  
Db 3274 TTAATGTAGAAATGAAGATATTTATGTTTATGCGGGAATATAAATTCATATATTA 3333  
QY 790 CTGAAGAAAGATCTCGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 849  
Db 3334 CTAAGAAAGATTCACCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 3393  
QY 850 AATACATCAATCAACCGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 909  
Db 3394 AATATATAAATATAGAGATTTATATATTTGGAAGAAATTTTATTAAGAAAGAAAGTCA 3453  
QY 910 AACTCTCAGTCCATCAATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 969  
Db 3454 AATCTCAATCTAATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 3513  
QY 970 TTCAACTGAATCAGGAAGCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1029  
Db 3514 TTTAATTTAATCAAGAGTGGAGATATATACCTATAATATTTTAAAGAAAGAGGAAGA 3573  
QY 1030 AAGCTTTTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1089  
Db 3574 AATTTGTTTATAGCTCTATAGTATCTGATGATGATGATGATGATGATGATGATGATGAT 3633  
QY 1090 GAATACAGCAAGACGGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1149  
Db 3634 GAATGATGAACAGCCACATATATTTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 3693  
QY 1150 ACTCAAGAAATCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1209  
Db 3694 ACTGATGATGAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 3753  
QY 1210 GAATPACAAAGACTTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1269  
Db 3754 GAGTATAAAGATTTATTTTATTAAGTAAATGTTAGTATTAAGAGAGGTTAAAGAGAAACA 3813  
QY 1270 TACAACCTGAAAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1329  
Db 3814 TATAAATTTAAATTTGGGATGATTAATGGCAGTTCATCCGAAAGACGAAGGTTGGACGNA 3873  
QY 1330 TA 1331  
Db 3874 TA 3875

## RESULT 13

US-10-051-952-3  
; Sequence 3, Application US/10051952  
; GENERAL INFORMATION:  
; APPLICANT: Walker, Patricia  
; TITLE OF INVENTION: Methods of Administering Botulinum Toxin  
; FILE REFERENCE: 2933CIP  
; CURRENT APPLICATION NUMBER: US/10/051,952  
; CURRENT FILING DATE: 2002-01-17  
; PRIOR APPLICATION NUMBER: 09/730,237  
; PRIOR FILING DATE: 2000-12-05  
; NUMBER OF SEQ ID NOS: 12  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 3  
; LENGTH: 3876  
; TYPE: DNA  
; ORGANISM: botulinum toxin  
US-10-051-952-3

Query Match 54.9%; Score 736; DB 39; Length 3876;  
Best Local Similarity 72.2%; Pred. No. 3.4e-192;  
Matches 955; Conservative 1; Mismatches 366; Indels 0; Gaps 0;

QY 10 ATGCCCAACAATACAAATCCGAAATCCCTGGAACATATCATCTCGAACCCTCGGTACAAA 69  
Db 2554 ATGTTTAATAAATATATATAGCGAAATTTTAAATAATATATATCTTAAATTTAAGATATAAG 2613  
QY 70 GACAACAATCTGATCGATCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 129  
Db 2614 GATTAATATTAATAGATTTATCAGATATGCGGCAAGGTAGAGGTATATGATGAGATC 2673  
QY 130 GAACTGAATGACAAAGAACCGAGTCAAACTGAACTCTTCGGTAACTCTAAGATCCGTT 189  
Db 2674 GAGCTAATGATAAATAATCAATTTAAATTAATTAAGTCTGAGCAAAATAGTAAGATTAGAT 2733  
QY 190 ACTCAGAACTCAGAACTCATCTTCAACTCCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 249  
Db 2734 ACTCAAAATCAGAAATATCATATTTAATAGTGTCTTCTGCTGCTGCTGCTGCTGCTGCTG 2793  
QY 250 ATTCTGATCCGAAATACAAAGACGAGTATCCAGATATCCAGATATACATCCAAATGAATAC 309  
Db 2794 ATAAGAATACCTAAATATAGAATGATGATGATGATGATGATGATGATGATGATGATGATG 2853  
QY 310 ATCATCAACTGCTGAGTAAGTAAGTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 369  
Db 2854 ATAATTAATTTGTAAGAAATATTTCCGGCTGGAATAATCTATTTAGGGGTANTAGGATA 2913  
QY 370 ATCTGACTCTGATCGATATCAACGGTAAGACCAAACTCTGATTTCTTCCGAATACAAATC 429  
Db 2914 ATATGACTTTAATTCATATTAATGGAATAACCAAACTCGTATTTTGAATATAACATA 2973  
QY 430 CGTGAAGACATCTCTGAATACATCAATCCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 489  
Db 2974 AGAAGAGATATACAGAGTATATAAATAGATGCTTTTGTAACTATTACTAATATTTG 3033  
QY 490 AACAACTGCTAAATCTACATCAACGGTAACTGGAATCTTAATACCGACATCAAGACATC 549  
Db 3034 AATAACGCTAATATTTATTAATGCTAGATCAATACAGATATTAAAGATATA 3093  
QY 550 CGTGAAGTATTCGCTCAACGGTGAATATCTTCAAACTGAGCGGTGACATCCATCGTACC 609  
Db 3094 AGAAGAGTATTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 3153  
QY 610 CAGTTCATCTGGAATGAATCTCTCCATCTTCAACACCGAATCTCTCAGTCCCAATATC 669  
Db 3154 CAATTTATTTGGATGAATATTTCACTATTTTAAATACGGATTTAAGTCAATCAATATT 3213  
QY 670 GAAGACGGTACAGATCCGATCTTACTCCGAATACCTGAAAGCTTCTGGGTAATCCG 729  
Db 3214 GAAGAAAGATATAAATTCATATAGCGAATATTTAAAGATTTTGGGGAATCCT 3273

QY 730 CTGATGTACAAAGAACTACTATATGTTCAATGCTGGTAAACAAAGAACTCTTACATCAA 789  
 DB 3274 TTAATGTAGATTAAGAAATATATATGTTTAATGCGGGAATAAAATTCATATATAA 3333  
 QY 790 CTGAAGAAAGACTCTCCGGTGGTGAATCTCGATCGTTCGTAATCAACACGAAGCTCT 849  
 DB 3334 CTAAGAAAGAACTCTAGCTGTAGTGAATTTTAACACGCTAGCAATATAATCAAAATCT 3393  
 QY 850 AATATACATCAACTACCGGACCTGTACATCGGTGAAAGTTCATCATCGGCGCAATCT 909  
 DB 3394 AATATATAAATTAATAGATTTATATATTTGGAGAAAATTTATTTAAGAGAAAGTCA 3453  
 QY 910 AACTCTGATGCTCAATGATGACATCGTACGTAAGAAAGAGCTGATCTACCTGAGCTTC 969  
 DB 3454 AATCTCAATCTATAAATGATGATAGTATAGTAAAGAAAGAGATATATATCTAGATTT 3513  
 QY 970 TTGAACCTGAATCAGAAAGGCGGTGATACACCTTCAAGTACTTCAAGAAAGAAAGAA 1029  
 DB 3514 TTTAAATTAATCAAGAGTGGAGAGTATATACCTATATAATTTTAAGAAAGAAAGAA 1089  
 QY 1030 AAGCTTTTCCTGCTCCGATCTCTGATCCGACGAACTCTACAGCACTCTACAGCACTCA 1089  
 DB 3574 AATTTGTTTTAGCTCTTAAAGTATCTGATGAGTTTTAGAACTATATACAAATAAAA 3633  
 QY 1090 GAATACGACCAAGCGGACCTACTCTGCGAGCTGCTTCCAGAAAGAGTCAAGAACTCT 1149  
 DB 3634 GAATATGATGACGCAACATATATGTTGCTGAGTTTTTAAAGAAAGAGTCAAGAACTCT 1149  
 QY 1150 ACTGACGAAATCGCTGATCGGTATCCACCGCTTCTACGAATCTGATCGTATCGAA 1209  
 DB 3694 ACTGATGATAGGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAA 3753  
 QY 1210 GAATACAAAGCACTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 1269  
 DB 3754 GAGTATAGAGATTTTGTATAGTAAATGATGATGATGATGATGATGATGATGATGATG 3813  
 QY 1270 TACAACTGAAATCGGTTGCAATGCGAGTCTATCCCGGAAAGAAAGAGTGGACCGAA 1329  
 DB 3814 TATAATTTAAATTTGGGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 3873  
 QY 1330 TA 1331  
 DB 3874 TA 3875  
 RESULT 14  
 US-09-547-188-3  
 Sequence 3, Application US/09547188  
 GENERAL INFORMATION:  
 APPLICANT: Kadhodayan, Salouneh  
 APPLICANT: Balhorn, Rod  
 TITLE OF INVENTION: Chimeric Biotoxins for Intracellular Delivery  
 TITLE REFERENCE: 17530-742 BIOTOXIN SEQ LISTING  
 CURRENT APPLICATION NUMBER: US/09/547,188  
 CURRENT FILING DATE: 2000-04-11  
 NUMBER OF SEQ ID NOS: 14  
 SOFTWARE: Patentin Ver. 2.0  
 ; SEQ ID NO 3  
 ; LENGTH: 4051  
 ; TYPE: DNA  
 ; ORGANISM: Clostridium botulinum  
 US-09-547-188-3

Query Match 49.5%; Score 663.4; DB 21; Length 4051;  
 Best Local Similarity 68.5%; Pred. No. 4.4e-172;  
 Matches 916; Conservative 0; Mismatches 421; Indels 0; Gaps 0;

QY 3 ATTCAGATGCGCAACAAATACAAATCCGAAATCCCTGAAACATATCATCTCAACCTGCG 62  
 DB 2643 AATAAATAATTTAATAATATATATACGAAATTTTAAATAATATATATTTAAATTAAG 2702  
 QY 63 TTACAAGACAACTATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 122

DB 2703 ATATAGAGATAAATAATTTAATAATTTATCAGATATCGAGCAAAAGGTAGAGGTATATGA 2762  
 QY 123 CGGTGTTGACGTGATGACAAAGCAACGCTTCAAACTGACCTCTTCCGCTAACTCTTAAGAT 182  
 DB 2763 TGGGTCACAGCTTATGATGATAAAATCAATTTAATACTAGTTCAGCAGATATAGAT 2822  
 QY 183 CCGTGTACTCAGATCAGAACATCATCTTCAACTCCGTAATTCCTGGACCTTCTCTGTTC 242  
 DB 2823 TAGAGTCACCTCAAAATCAGAAATATATATTTAATACTAGTATGTTCTGATTTTAGCGTTAG 2882  
 QY 243 CTCTCGATTCGTATCCCGAAATACAAAGACGCGGTATCCAGATTTACATCCCAATGA 302  
 DB 2883 CTCTTGGATAAGGATACCTTAAATATAGGAATGATGATATACAAATATATTTATATGA 2942  
 QY 303 ATACACCATCATCACTGATCGATGATCAAGAAATCACTCTGTTGGAGATCTCCATCCCGGTAA 362  
 DB 2943 ATATAGCAATTAATTTGATCAAAATTAATTCAGGCTGGAATAATATCTATTAGGGTAA 3002  
 QY 363 CCGTATCATCTGGACTCTGATGATCAACGTTAAGCACTCTGTTGGAGATCTCTCTCGAATA 422  
 DB 3003 TAGGATAATATGACCTTAAATGATTAATGGAATAAAGCAAACTAGTATTTTGAATA 3062  
 QY 423 CAACATCCGTTGAGACATCTCTGAATACATCAATCGTCTGTTCTCTGTTACCATCACAA 482  
 DB 3063 TAACATAACAGAGATATATCAGAGTATATAAATAGATGTTTGTGTAATTAATTAATA 3122  
 QY 483 TAACCTGACATGCTAATCTAATCTACATCAACGTTAAGCACTCTGTTGGAGATCTCTCGAATA 542  
 DB 3123 TAATTTGGATAATGCTTAAATTTATTAATGTCACGTTAGAACTCAAAATTTGGATATTA 3182  
 QY 543 AGACATCCGTTGAGGATGATCGTTAAGGTTGAAATCATCTTCAAACTGGAAGTCTGCGG 602  
 DB 3183 AGATATAGGAGAGATTTATGTTAATGTTGAAATAACATTTAAATTAGATGTTGATGA 3242  
 QY 603 TCGTACCGAGTCTCATCTGATGAATCTTCTCACTTCAACACCGAATCTCTCGATC 662  
 DB 3243 TAGAACACAAATTTATTTGGATGAAATATTTTAGTATTTTATAGCAATTAATTAATCA 3302  
 QY 663 CAATATCGAAGAACGTTACAAAGATCCAGTCTTCTTCTTCTTCTTCTTCTTCTTCTTCTT 722  
 DB 3303 AATATTAAGAGATATATAAATTCATCATATAGCAATTTAAAGATTTTGGGG 3362  
 QY 723 TAATCCGCTGATGTACAAAGAAATATATATGTTCAATGCTGTACACAGAACTCTTA 782  
 DB 3363 AATCTCTTAAATGATATAAAGAAATATATATGTTTAAATCGGGGATTAATAATTTCA 3422  
 QY 783 CATCAAACTGGAAGAAAGCTCTCCGTTGTTGTAATCTGCTGCTGCTGCTGCTGCTGCTGCT 842  
 DB 3423 TATTAACCTAGTGAAGAGATTCATCTGATGAAATATTAATACGTACAAATATATCA 3482  
 QY 843 GAATCTAAATACATCACTACCGGACCTGTACATCGGTGAAAGTTCATCTCCGCTG 902  
 DB 3483 GAATCCCAATTTATATAAATATAGAAATTTATATTTGAGAAATTTTATATAAGAA 3542  
 QY 903 CAATCTAACTCTCAGTCCATCAATGATGACATGATGATGATGATGATGATGATGATGATG 962  
 DB 3543 AGATCAAAATTTCTCAATCTAATATATATGATGATGATGATGATGATGATGATGATGATG 3602  
 QY 963 GGACTTTCTCAACCTGAATCAGAAATGCGGTGATATACACCTTCAACAGTCTCTCAAGAA 1022  
 DB 3603 AGATTTGGTACTTCACCATGAAGAGTGGAGATGATATGCTATTAATATTTTAAAGAA 3662  
 QY 1023 AGAAGAAAGCTTTTCTGCTCGATCTGATTCGCGAGCACTCTACACACCATCCA 1082  
 DB 3663 GGAAGAAATTTCTTTTATATATAAGTATGATCTTATGAATTTTATAGACATATAGA 3722  
 QY 1083 GATCAAGAAATACGAGCAACGCGGACCTTCTTCTGCGAGCTGCTTCTCAAGAAAGATGA 1142  
 DB 3723 AATAAAGAAATATGTAACGCGCACTATAGTCTGATGCTTTTAAAGAAAGATGA 3782  
 QY 1143 AGAATCTATGAGCAAAATCGGCTGATCGGTATCCACCTTCTACAGAACTCTGATCGT 1202  
 DB 3783 AGAAAGTACTGATGATATAGGATGATGATGATGATGATGATGATGATGATGATGATGATG 3842





QY 1270 TACAACCTGAACCTGGTTCGAATTGGCAGTTTCATCCGAAAGACGAGGTTGGACCGAA 1329  
Db 1464 TATACTCAAAATTGGGATGTAATTGGCAGTTTATTCCTAAGATGAGGGTGGACTGAA 1523

QY 1330 TA 1331  
Db 1524 TA 1525

Search completed: November 1, 2002, 08:15:27  
Job time : 3301 secs

Result	ID	Score	Query		Length	DB	ID	Description
			Match	%				
5	1	33.2	2.5	15645	6	US-10-085-198-111	Sequence 111, App	
5	2	32.6	2.4	2358	6	US-10-092-411A-1029	Sequence 1029, Ap	
5	3	32	2.4	1854	6	US-10-092-411A-1175	Sequence 1175, Ap	
5	4	32	2.4	2835	6	US-10-092-411A-1515	Sequence 1515, Ap	
5	5	32	2.4	3561	6	US-10-092-411A-1685	Sequence 1685, Ap	
5	6	32	2.4	6414	6	US-10-092-411A-1626	Sequence 1626, Ap	
5	7	31.8	2.4	2311	6	US-10-092-411A-818	Sequence 818, App	
5	8	31.6	2.4	80246	5	US-09-728-552-4	Sequence 4, Appli	
5	9	31	2.3	1236	5	US-10-092-411A-284	Sequence 284, App	
5	10	30.8	2.3	1524	1	PCr-US02-05068-179	Sequence 179, App	
5	11	30.8	2.3	8451	6	US-10-240-454-14	Sequence 14, Appl	
5	12	30.6	2.3	3558	6	US-10-092-411A-2439	Sequence 2439, Ap	
5	13	30.2	2.3	3390	6	US-10-268-838-1	Sequence 1, Appli	
5	14	30	2.2	6219	6	US-10-240-454-20	Sequence 20, Appl	
5	15	29.8	2.2	1032	1	PCr-US02-12342-2	Sequence 2, Appli	
5	16	29.8	2.2	1149	1	PCr-US02-12342-1	Sequence 1, Appli	
5	17	29.8	2.2	1376	1	PCr-US02-12342-1	Sequence 4, Appli	
5	18	29.8	2.2	1437	1	PCr-US02-12342-3	Sequence 3, Appli	
5	19	29.8	2.2	1440	6	US-10-092-411A-1291	Sequence 1291, Ap	
5	20	29.6	2.2	1287	6	US-10-092-411A-964	Sequence 964, App	
5	21	29.6	2.2	17527	6	US-10-240-454-27	Sequence 27, Appl	
5	22	29.4	2.2	537	6	US-10-092-411A-2727	Sequence 2727, Ap	
5	23	29.4	2.2	1524	1	PCr-US02-05068-169	Sequence 169, App	
5	24	29.4	2.2	2567	6	US-10-264-237-395	Sequence 395, App	
5	25	29.4	2.2	3397	6	US-10-159-901-27	Sequence 27, Appl	
5	26	29.2	2.2	1474	6	US-10-092-411A-1877	Sequence 1877, Ap	

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QY 408 TGTATCTTCGATACAAATCCGTAAGACATCTCTGAATACATCAATCGCTGTTCTT 467
Db 10069 CAGCAGCAGCTTCAACACAGCAGCAGCAACAGCTTCAACAGCAGCAGCAGCTACAA 10128
QY 468 CGTTACCATCAACAAATACCTGGAACAAATGCTAAATCTATACATCAACGGTA 517
Db 10129 CAGCAACAGCAACAAACAGCAGCAGCTTCAACAGCAGCAGCAACAGCA 10178

RESULT 2
US-10-092-411A-1029/c
; Sequence 1029, Application US/10092411A
; GENERAL INFORMATION:
; APPLICANT: Lynn Doucette-Stamm et al
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS
; FILE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 032796-101
; CURRENT APPLICATION NUMBER: US/10/092,411A
; PRIOR FILING DATE: 2002-03-07
; PRIOR APPLICATION NUMBER: US 09/134,001
; PRIOR FILING DATE: 1998-08-13
; PRIOR APPLICATION NUMBER: US 60/064,964
; PRIOR FILING DATE: 1997-11-08
; PRIOR APPLICATION NUMBER: US 60/055,779
; PRIOR FILING DATE: 1997-08-14
; NUMBER OF SEQ ID NOS: 5676
; SEQ ID NO 1029
; LENGTH: 2358
; TYPE: DNA
; ORGANISM: Staphylococcus epidermidis
US-10-092-411A-1029

Query Match 2.4%; Score 32.6; DB 6; Length 2358;
Best Local Similarity 53.5%; Pred. No. 3.5;
Matches 68; Conservative 0; Mismatches 59; Indels 0; Gaps 0;

QY 369 CATCTGACTCTGATGATATCAACGGTAAGACCAAACTGTATTCTTCGAATACAAAT 428
Db 703 CAACAAATTCGGTTCATATATAGTGTTCGCGATGCGGATGTCATGACAAATAC 644
QY 429 CGGTGAAGACATCTCTGAATACATCAATCGCTGTTCTTCTGTTACCATCAACATACCT 488
Db 643 CATGAAATCTTGTCTATATTCAGCTTTCACCGGAATAACATTCGATCATTTCTTACTG 584
QY 489 GAACAAAT 495
Db 583 TTACAAAT 577

RESULT 3
US-10-092-411A-1175/c
; Sequence 1175, Application US/10092411A
; GENERAL INFORMATION:
; APPLICANT: Lynn Doucette-Stamm et al
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS
; FILE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 032796-101
; CURRENT APPLICATION NUMBER: US/10/092,411A
; PRIOR FILING DATE: 2002-03-07
; PRIOR APPLICATION NUMBER: US 09/134,001
; PRIOR FILING DATE: 1998-08-13
; PRIOR APPLICATION NUMBER: US 60/064,964
; PRIOR FILING DATE: 1997-11-08
; PRIOR APPLICATION NUMBER: US 60/055,779
; PRIOR FILING DATE: 1997-08-14
; NUMBER OF SEQ ID NOS: 5676
; SEQ ID NO 1175
; LENGTH: 1854
; TYPE: DNA
; ORGANISM: Staphylococcus epidermidis
US-10-092-411A-1175
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Query Match 2.4%; Score 32; DB 6; Length 1854;
Best Local Similarity 50.7%; Pred. No. 4.5;
Matches 77; Conservative 0; Mismatches 75; Indels 0; Gaps 0;

QY 183 CGGTGTTACTCAGATCAGAACATCATCTCTCACTCGTATTCCTGACTTCTCTGTTTC 242
Db 880 CCATGATAAGAAAATTGGAATAAAGAACCAATAACCAAGGAATCTAATTTTCGACCA 821
QY 243 CTTCGGATTCTGATCCCGAAATACAAGACGACGGTATCCAGAAATFACATCCACAATGA 302
Db 820 TCTCTCATTAGTTTAAAGAACACAGCACCGCGCAAGAAATGCACCTAATATGT 761
QY 303 ATACACCATCATCACTGCTGATGAAGATAACT 334
Db 760 ATTACACCAACACCTTCAGCAAGTGTCTACT 729

RESULT 4
US-10-092-411A-1515/c
; Sequence 1515, Application US/10092411A
; GENERAL INFORMATION:
; APPLICANT: Lynn Doucette-Stamm et al
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS
; FILE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 032796-101
; CURRENT APPLICATION NUMBER: US/10/092,411A
; PRIOR FILING DATE: 2002-03-07
; PRIOR APPLICATION NUMBER: US 09/134,001
; PRIOR FILING DATE: 1998-08-13
; PRIOR APPLICATION NUMBER: US 60/064,964
; PRIOR FILING DATE: 1997-11-08
; PRIOR APPLICATION NUMBER: US 60/055,779
; PRIOR FILING DATE: 1997-08-14
; NUMBER OF SEQ ID NOS: 5676
; SEQ ID NO 1515
; LENGTH: 2835
; TYPE: DNA
; ORGANISM: Staphylococcus epidermidis
US-10-092-411A-1515

Query Match 2.4%; Score 32; DB 6; Length 2835;
Best Local Similarity 49.4%; Pred. No. 5.3;
Matches 83; Conservative 0; Mismatches 85; Indels 0; Gaps 0;

QY 935 TCGTAGTAAAGAGACATCATCTACCTGGACTTCTTCAACCTGAATCAGGAATGGCGTG 994
Db 1639 TCGGACTCAACAAGTACGTCAACGTCAAGAAAGTCATCAACGTCAACGAGTGAGAGTGAC 1580
QY 995 TATACACCTACAGTACTCTCAGAAGAGAGAGAGAAAGCTTTTCTGCTCCGATCTCTG 1054
Db 1579 TCACAAGTGAAGTACGTCAATTAAGCGAGTCGACAGCAACAGGTTTCAGATTCAACA 1520
QY 1055 ATTCCGACGAACCTTACACACCATCCAGATCAAGAAATACGACGAAC 1102
Db 1519 AGCGGTGACATCCGACAGTGCATCAACATCAACGAGTGTGAGCGAC 1472

RESULT 5
US-10-092-411A-1685/c
; Sequence 1685, Application US/10092411A
; GENERAL INFORMATION:
; APPLICANT: Lynn Doucette-Stamm et al
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS
; FILE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 032796-101
; CURRENT APPLICATION NUMBER: US/10/092,411A
; PRIOR FILING DATE: 2002-03-07
; PRIOR APPLICATION NUMBER: US 09/134,001
; PRIOR FILING DATE: 1998-08-13
; PRIOR APPLICATION NUMBER: US 60/064,964
; PRIOR FILING DATE: 1997-11-08
; PRIOR APPLICATION NUMBER: US 60/055,779
; PRIOR FILING DATE: 1997-08-14
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; NUMBER OF SEQ ID NOS: 5676
; SEQ ID NO 1685
; LENGTH: 3561
; TYPE: DNA
; ORGANISM: Staphylococcus epidermidis
US-10-092-411A-1685

Query Match      2.4%; Score 32; DB 6; Length 3561;
Best Local Similarity 49.4%; Pred. No. 5.8;
Matches 83; Conservative 0; Mismatches 85; Indels 0; Gaps 0;

QY 935 TCGTAGTAAAGAGACATCTACCTGCGACTTCTTCAACCTGAATCAGAAATGGCGTG 994
DB 2435 TCGGACTCAACAAGTACGTCACGTCGCAAAAGTGCATCAACGTCACAGAGTGAGAGTGAC 2376
QY 995 TATACACCTACAGTACTCTCAAGAAAGAGAGAGAAAAGCTTTTCTGCTCCGATCTCTG 1054
DB 2375 TCACCAAGTGAAGAGTACGTCATTAAGCGAGTCGACAGCAACGAGTTTCAGATTCAACA 2316
QY 1055 ATTCCGACGAATCTTACACACCATCCAGATCAAGAATACGACGAAC 1102
DB 2315 AGCGCGTCGACATCGGACAGTGCATCAACATCAACGAGGTGTGAGCGAC 2268

RESULT 6
US-09-092-411A-1626
; Sequence 1626, Application US/10092411A
; GENERAL INFORMATION:
; APPLICANT: Lynn Doucette-Stamm et al
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS
; FILE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 032796-101
; CURRENT APPLICATION NUMBER: US/10/092,411A
; CURRENT FILING DATE: 2002-03-07
; PRIOR APPLICATION NUMBER: US 09/134,001
; PRIOR FILING DATE: 1998-08-13
; PRIOR APPLICATION NUMBER: US 60/064,964
; PRIOR FILING DATE: 1997-11-08
; PRIOR APPLICATION NUMBER: US 60/055,779
; PRIOR FILING DATE: 1997-08-14
; NUMBER OF SEQ ID NOS: 5676
; SEQ ID NO 1626
; LENGTH: 6414
; TYPE: DNA
; ORGANISM: Staphylococcus epidermidis
US-10-092-411A-1626

Query Match      2.4%; Score 32; DB 6; Length 6414;
Best Local Similarity 49.4%; Pred. No. 7.3;
Matches 83; Conservative 0; Mismatches 85; Indels 0; Gaps 0;

QY 935 TCGTAGTAAAGAGACATCTACCTGCGACTTCTTCAACCTGAATCAGAAATGGCGTG 994
DB 3610 TCGGACTCAACAAGTACGTCACGTCGCAAAAGTGCATCAACGTCACAGAGTGAGAGTGAC 3659
QY 995 TATACACCTACAGTACTTCAAGAAAGAGAGAGAAAAGCTTTTCTGCTCCGATCTCTG 1054
DB 3670 TCACCAAGTGAAGAGTACGTCATTAAGCGAGTCGACAGCAACGAGTTTCAGATTCAACA 3729
QY 1055 ATTCCGACGAATCTTACACACCATCCAGATCAAGAATACGACGAAC 1102
DB 3730 AGCGCGTCGACATCGGACAGTGCATCAACATCAACGAGGTGTGAGCGAC 3777

RESULT 7
US-10-092-411A-818/c
; Sequence 818, Application US/10092411A
; GENERAL INFORMATION:
; APPLICANT: Lynn Doucette-Stamm et al
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS
; FILE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 032796-101
; CURRENT APPLICATION NUMBER: US/10/092,411A
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; CURRENT FILING DATE: 2002-03-07
; PRIOR APPLICATION NUMBER: US 09/134,001
; PRIOR FILING DATE: 1998-08-13
; PRIOR APPLICATION NUMBER: US 60/064,964
; PRIOR FILING DATE: 1997-11-08
; PRIOR APPLICATION NUMBER: US 60/055,779
; PRIOR FILING DATE: 1997-08-14
; NUMBER OF SEQ ID NOS: 5676
; SEQ ID NO 818
; LENGTH: 2211
; TYPE: DNA
; ORGANISM: Staphylococcus epidermidis
US-10-092-411A-818

Query Match      2.4%; Score 31.8; DB 6; Length 2211;
Best Local Similarity 47.7%; Pred. No. 5.4;
Matches 93; Conservative 0; Mismatches 102; Indels 0; Gaps 0;

QY 387 TATCAACGCTAGAGCAAAATCTGTATCTTCGAATATCAACATCCGCTGAACACATCTCTGA 446
DB 1669 TATTGACGATTTGTATTGATGTAACACACCGCAATCCACAGCTGCGTACAAATCTTCAT 1610
QY 447 ATACATCAATCGTCTGTTCTTCGTTTACCATCACCAATAACCTGAACATGCTAAATCTA 506
DB 1609 CATTACCAAAATGATATTTTCAATTAACGACTTCTTAATTTTCTCAGTTAGATAATCTT 1550
QY 507 CATCAACGCTAAATGGAATCTATATACGACATCAACGACATCCGCTGAAGTTATCGCTAA 566
DB 1549 CAACACGGAATCTTGTCTTCTTAATCTCCGCTTACCATAAATTTACCTTTTCAATAT 1490
QY 567 CGGTGAAATCATCTT 581
DB 1489 TAGAAAAACGATCTT 1475

RESULT 8
US-09-728-552-4/c
; Sequence 4, Application US/09728552
; GENERAL INFORMATION:
; APPLICANT: Choo, Kong-Hong Andy
; APPLICANT: Du Sart, Desiree
; APPLICANT: Cancilla, Michael R.
; TITLE OF INVENTION: A NOVEL NUCLEIC ACID MOLECULE
; FILE REFERENCE: Davies Col
; CURRENT APPLICATION NUMBER: US/09/728,552
; CURRENT FILING DATE: 2000-12-02
; PRIOR APPLICATION NUMBER: 09/078,294
; PRIOR FILING DATE: 1998-05-13
; NUMBER OF SEQ ID NOS: 29
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 4
; LENGTH: 80246
; TYPE: DNA
; ORGANISM: Nucleotide sequence of NC-contig
US-09-728-552-4

Query Match      2.4%; Score 31.6; DB 5; Length 80246;
Best Local Similarity 50.0%; Pred. No. 24;
Matches 79; Conservative 0; Mismatches 79; Indels 0; Gaps 0;

QY 1179 CGGTTTCTACGATCTGGTATCGTATTCGAAGATCAAAAGACTACTTCTGCATCTCAA 1238
DB 32174 CTGTTTTTAGCCACCTGGTTTGTGATCTCTGTAATGACAGCTCTGGGATACTAATCCAG 32115
QY 1239 ATGCTACCTGAAGAGAGTTAAACGCAAAACCGTACAACTGAAACTGGGTTGCAATTGSCA 1298
DB 32114 GGCTTCTAGAGTGAAGGGAATCCACCCCTACTCCCTAAGACAGAGGTCGCCACTCCCT 32055
QY 1299 GTTCATCCGGAAGACGAAGGTTGGACCGAATAGTAAG 1336
DB 32054 GGCCATGGCAGTACCACTGTGTGACCTGTGTAGGAAG 32017
```

```
RESULT 9
; Sequence 284, Application US/10092411a
; GENERAL INFORMATION:
; APPLICANT: Lynn Doucette-Stamm et al
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS
; TITLE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 032796-101
; CURRENT APPLICATION NUMBER: US/10/092,411a
; CURRENT FILING DATE: 2002-03-07
; PRIOR APPLICATION NUMBER: US 09/134,001
; PRIOR FILING DATE: 1998-08-13
; PRIOR APPLICATION NUMBER: US 60/064,964
; PRIOR FILING DATE: 1997-11-08
; PRIOR APPLICATION NUMBER: US 60/055,779
; PRIOR FILING DATE: 1997-08-14
; NUMBER OF SEQ ID NOS: 5676
; SEQ ID NO 284
; LENGTH: 1236
; TYPE: DNA
; ORGANISM: Staphylococcus epidermidis
; US-092-411a-284

Query Match
; Sequence 179, Application PC/TUS0205068
; Best Local Similarity 46.5%; Pred. No. 6.9;
; Matches 100; Conservative 0; Mismatches 115; Indels 0; Gaps 0;
; Length 1236;

; 261 GAAATACAGACGACGGTATCCAGATTACATCCACAATGAATACACCATCACTG 320
; 442 GACCAAGCTCAGCACTTAACACCTTTAATCTTTCAGTAACTTCAGTTCATCACTT 383
; 321 CATGAAGATTAATCTGTTGGAGATCTCCATCCGGGTAACCGTATCATCTGGACTCT 380
; 382 CATCGTTATCTAGTTTCTTGTAATATTCATAAGATTTTCAGTTTCAAGTTGCTTT 323
; 381 GATCGATATCACGGTAAAGACCAATCTGTTCTTGAATACACATCGTGAAGACAT 440
; 322 TTGATTAATGATGCCCAAGTATCAATTTCTTGTGCACTCGATTTAGTGACATG 263
; 441 CTCTGAATACATCAATCGCTGGTCTTCTCGTTACCA 475
; 262 CTTCGACTTCATCAGCGACTTTTCAACTTCACTA 228

RESULT 10
; Sequence 179, Application PC/TUS0205068
; GENERAL INFORMATION:
; APPLICANT: Diversa Corporation
; TITLE OF INVENTION: ENZYMES HAVING ALPHA AMYLASE ACTIVITY
; TITLE OF INVENTION: AND METHODS OF USE THEREOF
; FILE REFERENCE: 09010-108W01
; CURRENT APPLICATION NUMBER: PC/TUS02/05068
; CURRENT FILING DATE: 2002-02-21
; PRIOR APPLICATION NUMBER: US 60/270,495
; PRIOR FILING DATE: 2001-02-21
; PRIOR APPLICATION NUMBER: US 60/270,496
; PRIOR FILING DATE: 2001-02-21
; PRIOR APPLICATION NUMBER: US 60/291,122
; PRIOR FILING DATE: 2001-05-14
; NUMBER OF SEQ ID NOS: 321
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 179
; LENGTH: 1524
; TYPE: DNA
; ORGANISM: Environmental
; PC-TUS02-05068-179

Query Match
; Sequence 179, Application PC/TUS0205068
; Best Local Similarity 46.3%; Pred. No. 8.4;
; Matches 101; Conservative 0; Mismatches 117; Indels 0; Gaps 0;
; Length 1524;

; 554 GTCTCAGTCCATTCGAGACGGGTACAGATCCAGTCTTACTCCGAATACCTGAAGA 713
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Db 1074 GTTAGACTCGACAGTGGATTGGTTCAGCCTTGTCTAGGCATTCATCTTGTGG 1133
QY 714 CTTCGGGTAATCCGCTGATGACAAAGAAATCTATATGTTCAATGCTGCGTAACA 773
Db 1134 TGAAGAAGGTATCCATCGTGTCTTACGAGATTACTAGCGCGCAGTACAGGACAA 1193
QY 774 GAATCTTACATCAAACTGAAGAAGACTCTCCGTTGGTGAATCTCTGACTCGTTCCA 833
Db 1194 AGTTACACATTAATATGCGCAAGTGCCTTACATTAAGAACTTGAACACTCGGTA 1253
QY 834 ATACACACAGAACTCTAAATACATCACTACCGCGACC 871
Db 1254 AGATATCGGTATGCAACAGAAATCTTATCTCGACC 1291
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## RESULT 11

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US-10-240-454-14/c
; Sequence 14, Application US/10240454
; GENERAL INFORMATION:
; APPLICANT: OLEK, Alexander
; APPLICANT: PIEPENBROCK, Christian
; APPLICANT: BERLIN, Kurt
; TITLE OF INVENTION: Diagnosis of Diseases Associated with Metabolism
; FILE REFERENCE: 5013.11010
; CURRENT APPLICATION NUMBER: US/10/240,454
; CURRENT FILING DATE: 2002-10-02
; PRIOR APPLICATION NUMBER: PCT/EP01/04016
; PRIOR FILING DATE: 2001-04-06
; PRIOR APPLICATION NUMBER: DE 10019058.8
; PRIOR FILING DATE: 2000-04-06
; PRIOR APPLICATION NUMBER: DE 10019173.8
; PRIOR FILING DATE: 2000-04-07
; PRIOR APPLICATION NUMBER: DE 10032529.7
; PRIOR FILING DATE: 2000-06-30
; PRIOR APPLICATION NUMBER: DE 10043826.1
; PRIOR FILING DATE: 2000-09-01
; NUMBER OF SEQ ID NOS: 68
; SEQ ID NO 14
; LENGTH: 8451
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: chemically treated genomic DNA (Homo sapiens)
; US-10-240-454-14
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Query Match
; Sequence 14, Application US/10240454
; Best Local Similarity 50.0%; Pred. No. 16;
; Matches 77; Conservative 0; Mismatches 77; Indels 0; Gaps 0;
; Length 8451;

QY 389 TCAACGGTAAGACCAATCTGTATTTCTGAATACACATCCGTAAGACATCTCTGAAT 448
Db 731 TCTCCCTTAAAAAACCACCAAAATCATAAACAAACCTTCTCAACATACAAAAA 672
QY 449 ACATCAATCGCTGGTCTTCTGTTACCATCACCAATACCTGAACAATGCTAAATCTACA 508
Db 671 ACATAAACTATCGAACCGGTAATCTACACCTATATCCCAACACCTTTAAACAAACGAA 612
QY 509 TCAACGGTAAACTGGAATCTATATACCGGACATCAA 542
Db 611 ACAGACGATCACGAAATCAAAATTTAAACCA 578
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## RESULT 12

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US-10-092-411a-2439/c
; Sequence 2439, Application US/10092411a
; GENERAL INFORMATION:
; APPLICANT: Lynn Doucette-Stamm et al
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCC
; TITLE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 032796-101
; CURRENT APPLICATION NUMBER: US/10/092,411a
; CURRENT FILING DATE: 2002-03-07
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GenCore version 5.1.3  
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OM protein - protein search, using sw model

Run on: November 1, 2002, 07:18:23 ; Search time 26 seconds  
(without alignments)  
497.926 Million cell updates/sec

Title: US-09-910-186a-8  
Perfect score: 2350  
Sequence: 1 MANKYSEILNIIILNRYK.....YNKLGCNQIFPKDEGWTE 440

Scoring table: BLOSUM62  
Gap 10.0 , Gapext 0.5

Searched: 262574 seqs, 29422922 residues

Total number of hits satisfying chosen parameters: 262574

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Issued Patents AA:  
1: /cgn2\_6/ptodata/1/iaa/5A.COMB.pep.\*  
2: /cgn2\_6/ptodata/1/iaa/5B.COMB.pep.\*  
3: /cgn2\_6/ptodata/1/iaa/6A.COMB.pep.\*  
4: /cgn2\_6/ptodata/1/iaa/6B.COMB.pep.\*  
5: /cgn2\_6/ptodata/1/iaa/PCBUS.COMB.pep.\*  
6: /cgn2\_6/ptodata/1/iaa/backfiles1.pep.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	1667	70.9	1169	4 US-09-255-829-20	Sequence 20, Appl
2	831.5	35.4	438	1 US-08-480-604A-23	Sequence 23, Appl
3	831.5	35.4	438	2 US-08-405-496A-23	Sequence 23, Appl
4	831.5	35.4	438	4 US-08-915-136-23	Sequence 23, Appl
5	831.5	35.4	462	1 US-08-480-604A-26	Sequence 26, Appl
6	831.5	35.4	462	2 US-08-405-496A-26	Sequence 26, Appl
7	831.5	35.4	462	4 US-08-915-136-26	Sequence 26, Appl
8	831.5	35.4	1296	1 US-08-480-604A-28	Sequence 28, Appl
9	831.5	35.4	1296	2 US-08-405-496A-28	Sequence 28, Appl
10	831.5	35.4	1296	4 US-08-915-136-28	Sequence 28, Appl
11	595	25.3	452	1 US-07-618-312A-2	Sequence 2, Appl
12	595	25.3	452	1 US-08-280-228-2	Sequence 2, Appl
13	594	25.3	452	1 US-07-618-312A-4	Sequence 4, Appl
14	594	25.3	452	1 US-08-280-228-4	Sequence 4, Appl
15	594	25.3	618	1 US-08-668-381A-5	Sequence 5, Appl
16	594	25.3	853	4 US-08-913-880C-17	Sequence 17, Appl
17	594	25.3	858	4 US-08-913-880C-16	Sequence 16, Appl
18	594	25.3	860	4 US-08-913-880C-15	Sequence 15, Appl
19	594	25.3	862	4 US-08-913-880C-14	Sequence 14, Appl
20	594	25.3	865	4 US-08-913-880C-13	Sequence 13, Appl
21	594	25.3	866	4 US-08-913-880C-12	Sequence 12, Appl
22	594	25.3	874	4 US-08-913-880C-11	Sequence 11, Appl
23	594	25.3	875	4 US-08-913-880C-10	Sequence 10, Appl
24	594	25.3	1315	4 US-08-913-880C-1	Sequence 1, Appl
25	575	24.5	452	1 US-08-110-786A-8	Sequence 8, Appl
26	169.5	7.2	140	4 US-08-446-114A-22	Sequence 22, Appl
27	163	6.9	2391	2 US-08-446-855A-2	Sequence 2, Appl

28	163	6.9	2391	4 US-09-150-741-2	Sequence 2, Appl
29	137.5	5.9	476	4 US-09-316-083-3	Sequence 3, Appl
30	126	5.4	1435	2 US-08-568-459A-4	Sequence 4, Appl
31	126	5.4	1435	2 US-08-487-826B-4	Sequence 4, Appl
32	126	5.4	1435	4 US-09-210-288-4	Sequence 4, Appl
33	124.5	5.3	493	4 US-08-686-968C-4	Sequence 4, Appl
34	124	5.3	878	4 US-09-134-001C-4378	Sequence 4378, Ap
35	123.5	5.3	2366	1 US-08-480-604A-10	Sequence 10, Appl
36	123.5	5.3	2366	4 US-08-405-496A-10	Sequence 10, Appl
37	123.5	5.3	2366	4 US-08-915-136-10	Sequence 10, Appl
38	123.5	5.3	2366	4 US-08-957-310-10	Sequence 10, Appl
39	123.5	5.3	3135	1 US-08-323-170B-2	Sequence 2, Appl
40	123.5	5.3	3135	4 US-08-954-441-2	Sequence 2, Appl
41	120	5.1	2710	1 US-08-480-604A-6	Sequence 6, Appl
42	120	5.1	2710	2 US-08-405-496A-6	Sequence 6, Appl
43	120	5.1	2710	4 US-08-915-136-6	Sequence 6, Appl
44	120	5.1	2710	4 US-08-957-310-6	Sequence 6, Appl
45	118.5	5.0	990	2 US-08-392-625-20	Sequence 20, Appl

ALIGNMENTS

RESULT 1  
US-09-255-829-20  
; Sequence 20, Application US/09255829  
; Patent No. 6461617  
; GENERAL INFORMATION:  
; APPLICANT: Shone, Clifford Charles  
; APPLICANT: Quinn, Conrad Padraig  
; APPLICANT: Foster, Keith Alan  
; TITLE OF INVENTION: Recombinant Toxin Fragments  
; NUMBER OF SEQUENCES: 29  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: STERN, KESSLER, GOLDSTEIN, & FOX P.L.L.C.  
; STREET: 1100 NEW YORK AVENUE, NW, SUITE 600  
; CITY: WASHINGTON  
; STATE: DC  
; COUNTRY: USA  
; ZIP: 20005-3934  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patentin Release #1.0, version #1.30 (EPO)  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/09/255,829  
; FILING DATE: 23-FEB-1999  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: PCT/GB97/02273  
; FILING DATE: 22-AUG-1997  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 08/782,893  
; FILING DATE: 27-DEC-1996  
; ATTORNEY/AGENT INFORMATION:  
; NAME: ESMOND, ROBERT W.  
; REGISTRATION NUMBER: 32,893  
; REFERENCE/DOCKET NUMBER: 1581.0130002  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 202-371-2600  
; TELEFAX: 202-371-2540  
; INFORMATION FOR SEQ ID NO: 20:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 1169 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear  
; MOLECULE TYPE: protein  
; US-09-255-829-20

Query Match 70.9%; Score 1667; DB 4; Length 1169;  
Best Local Similarity 99.7%; Pred. No. 1.7e-121;  
Matches 317; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 1 MANKYSEILNIIILRLKNNLIDLSYGAKVEYDGVDELNDKQFKLTSSANSKIRV 60  
Db 852 MFKNYSEILNIIILRLKNNLIDLSYGAKVEYDGVDELNDKQFKLTSSANSKIRV 911  
QY 61 TQNONIFNSVDFSVFWRIPRYKNDGIONTHNEYTTIINCKMKNNGKISIRGNRI 120  
Db 912 TQNONIFNSVDFSVFWRIPRYKNDGIONTHNEYTTIINCKMKNNGKISIRGNRI 971  
QY 121 IWLIDINGKTSVFEYNIRDISYINRFFVTITNNLNNAKIYINGKLESNTDIDKI 180  
Db 972 IWLIDINGKTSVFEYNIRDISYINRFFVTITNNLNNAKIYINGKLESNTDIDKI 1031  
QY 181 REVIANGEIIFKLDGIDRTQTFWKKYSIFENTELSSQNSIEERYKIOSYSEYLKDFWGNP 240  
Db 1032 REVIANGEIIFKLDGIDRTQTFWKKYSIFENTELSSQNSIEERYKIOSYSEYLKDFWGNP 1091  
241 LMYNKEYYMFNAGNKNYSIKLKADSPVGEILTRSKYNQNSKIYINRDLYIGKFIIRKS 300  
1092 LMYNKEYYMFNAGNKNYSIKLKADSPVGEILTRSKYNQNSKIYINRDLYIGKFIIRKS 1151  
301 NSQSIINDIVRKEDYIYL 318  
1152 NSQSIINDIVRKEDYIYL 1169  
RESULT 2  
US-08-480-604A-23  
Sequence 23, Application US/08480604A  
Patent No. 5736139  
GENERAL INFORMATION:  
APPLICANT: KINK, JOHN A.  
APPLICANT: THALLEY, BRUCE S.  
APPLICANT: PADHYE, NISHA V.  
APPLICANT: FIRCA, JOSEPH R.  
APPLICANT: STAFFORD, DOUGLAS C.  
TITLE OF INVENTION: VACCINE AND ANTITOXIN FOR TREATMENT AND  
PREVENTION OF C. DIFFICILE DISEASE  
NUMBER OF SEQUENCES: 32  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: MEDLEN & CARROLL, LLP  
STREET: 220 MONTGOMERY STREET, SUITE 2200  
CITY: SAN FRANCISCO  
STATE: CALIFORNIA  
COUNTRY: UNITED STATES OF AMERICA  
ZIP: 94104  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US 08/480,604A  
FILING DATE: 07-JUN-1995  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/422,711  
FILING DATE: 14-APR-1995  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/405,496  
FILING DATE: 16-MAR-1995  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/329,154  
FILING DATE: 25-OCT-1994  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/161,907  
FILING DATE: 02-DEC-1993  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/985,321  
FILING DATE: 04-DEC-1992  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/429,791  
FILING DATE: 31-OCT-1989  
ATTORNEY/AGENT INFORMATION:

NAME: INGOLIA, DIANE E.  
REGISTRATION NUMBER: 40,027  
REFERENCE/DOCKET NUMBER: OPHD-01763  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 705-8410  
TELEFAX: (415) 397-8338  
INFORMATION FOR SEQ ID NO: 23:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 438 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
US-08-480-604A-23  
Query Match 35.4%; Score 831.5; DB 1; Length 438;  
Best Local Similarity 40.0%; Pred. No. 4.7e-57;  
Matches 180; Conservative 83; Mismatches 150; Indels 37; Gaps 10;  
QY 4 KYNSEILNIIILRLKNNLIDLSYGAKVEYDGVDELNDKQFKLTSSANSKIRV 61  
Db 10 EYKNIINTSILNRYESNHLIDLSRYASKINIGSKVNFDPIDKNOIOLFNLSSKIEVI 69  
QY 62 QNQNIIENSVELDFSVFWRIPRYKNDGIONTHNEYTTIINCKMKNNGKISIRGNRI 121  
Db 70 LKNAIVYNSMIEFSTSFWRIPRYKFN---SISLANEYTTIINCKMKNNGKISIRGNRI 126  
QY 122 WTLIDINGKTSVFEYNIRDISYINRFFVTITNNLNNAKIYINGKLESNTDIDKI 180  
Db 127 WTLQDTQEIQRVVFYKYSQMINISDYINRFFVTITNNLNNAKIYINGKLESNTDIDKI 186  
QY 181 REVIANGEIIFKLDGIDRTQTFWKKYSIFENTELSSQNSIEERYKIOSYSEYLKDFWGNP 240  
Db 187 GNHASNNIMFKLDGDRDTHRYLWIKYFNLFDEKELNEIKLDYDQNSGILKDFWGDY 246  
QY 241 LMYNKEYYMFNAGNKNYSIKLK---DPSVGEILTRSKYNQNSKIYINRDLYIG 291  
Db 247 LOYDKPYMLNLYDPNKNYDVNVNGIRGYWYLGPRGSMVTNIIYLNSS-----LYRG 299  
QY 292 EKFTIRKSNQSINDIVRKEDYIYLDFFENLQEWRYVYKYFKKEEKLFLAPISDS 351  
Db 300 TKFIIKKYASGN--KONIVRNDRVYINVVANKRYLATNASQAGVEKILSALEIPDVG 357  
QY 352 ELYNTQIKYDEQP--TYSQQLLFKXDESTDEIGLIGHRFYSGIVFEYKDYFCISK 410  
Db 358 NLSQVYVYMKSKNDQGITNCKM--NLQDNNGNDIGFIGHOFNNIA-----KLYASN 407  
QY 411 WYLKEVKRKPYNLKGNNQFIPKDEGWE 440  
Db 408 WYNQIERS--SRTIGCSWEFIPVDDGWE 435  
RESULT 3  
US-08-405-496A-23  
Sequence 23, Application US/08405496A  
Patent No. 5919665  
GENERAL INFORMATION:  
APPLICANT: WILLIAMS, JAMES A.  
TITLE OF INVENTION: VACCINE FOR CLOSTRIDIUM BOTULINUM  
TITLE OF INVENTION: NEUROTOXIN  
NUMBER OF SEQUENCES: 30  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: MEDLEN & CARROLL, LLP  
STREET: 220 MONTGOMERY STREET, SUITE 2200  
CITY: SAN FRANCISCO  
STATE: CALIFORNIA  
COUNTRY: USA  
ZIP: 94104  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:

APPLICATION NUMBER: US 08/405,496A  
 FILING DATE: 16-MAR-1995  
 CLASSIFICATION: 424  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 08/329,154  
 FILING DATE: 25-OCT-1994  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 08/161,907  
 FILING DATE: 02-DEC-1993  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 07/985,321  
 FILING DATE: 04-DEC-1992  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 07/429,791  
 FILING DATE: 31-OCT-1989  
 ATTORNEY/AGENT INFORMATION:  
 NAME: INGOLIA, DIANE E.  
 REGISTRATION NUMBER: 40,027  
 REFERENCE/DOCKET NUMBER: OPHD-01308  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: (415) 705-8410  
 TELEFAX: (415) 397-8338  
 INFORMATION FOR SEQ ID NO: 23:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 438 amino acids  
 TYPE: amino acid  
 TOPOLOGY: linear  
 MOLECULE TYPE: protein  
 US-08-405-496A-23

Query Match 35.4%; Score 831.5; DB 2; Length 438;  
 Best Local Similarity 40.0%; Pred. No. 4.7e-57;  
 Matches 180; Conservative 83; Mismatches 150; Indels 37; Gaps 10;

4 KYNEILLNLTILNRYKDNLDLSCYGAKEVYDGVNLDKNOFKLTSSANSKIRVT 61  
 10 EYKINILNLTILNRYKDNLDLSCYGAKEVYDGVNLDKNOFKLTSSANSKIRVT 69  
 62 QNONTIFNSVFLDSFVSWIRIPKYNKNDGIONTHREYTIINCMKNNSGKISIRGNRII 121  
 70 LKNAIVNMSYENFSTFWIRIPKYNF--SISLNNEYTIINCMNNSGKISIRGNRII 126  
 122 WTLIDNGKTSVFEVNIREDISEYINRFFVTIINN-LNNAKIYINKGLESNTDIDKI 180  
 127 WTLQTOEIKQVVFVKYSQMINISDIYINRFFVTIINN-LNNAKIYINKGLESNTDIDKI 186  
 181 REVANGELIIFKLDGIDRTQFIWMKYFSTFNTLSQSNIEERYKIQSYSEYKDFWGNP 240  
 187 GNHASNINMFKLDSCHDTHRYIWKYFNFLDKELNEKEIKDLYDNOSNGILKDFWGDY 246  
 241 LMVKEYYMFNAGKNYIKLK-----DSPVGEILTRSKYKNSKYINRDLIYG 291  
 247 LQYDKPYMLNLYDPNKYVDVNNVIRGYMYLKGPRGSVMITNLYLNS-----LYRG 299  
 292 EKFIIRKNSOSINDITVREDYIYDFNLQEMWVYTYKYFKKEEKLFLAPISDSD 351  
 300 TKFIKKYASGN--KDLVRNDRVINNVVKNKEYELANASQAGVEKLSALEIPDVG 357  
 352 ELYNTIQIKEYDEOP--YVSCOLLEPKKEDEESTDEIGLIGIRHYFESGIVFEYKDYFCISK 410  
 358 NLSQVNVNKNNDQGITNKKRM--NLQDNNGNDIGFIFGHQFNIA-----KLVASN 407  
 411 WYLVKVKPKYKLNKLGQWFOIPKDEGWE 440  
 408 WYNQIERS--SRVLGCSWEFIPVDDGWE 435

RESULT 4  
 US-08-915-136-23  
 ; Sequence 23, Application US/08915136  
 ; Patent No. 6290360  
 ; GENERAL INFORMATION:  
 ; APPLICANT: KINK, JOHN A.

APPLICANT: THALLEY, BRUCE S.  
 APPLICANT: PADHIE, NISHA V.  
 APPLICANT: FIRCA, JOSEPH R.  
 APPLICANT: STAFFORD, DOUGLAS C.  
 TITLE OF INVENTION: VACCINE AND ANTITOXIN FOR TREATMENT AND  
 PREVENTION OF C. DIFFICILE DISEASE  
 NUMBER OF SEQUENCES: 32  
 CORRESPONDENCE ADDRESS:  
 ADDRESSEE: MEDLEN & CARROLL, LLP  
 STREET: 220 MONTGOMERY STREET, SUITE 2200  
 CITY: SAN FRANCISCO  
 STATE: CALIFORNIA  
 COUNTRY: UNITED STATES OF AMERICA  
 ZIP: 94104  
 COMPUTER READABLE FORM:  
 MEDIUM TYPE: Floppy disk  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: PatentIn Release #1.0, Version #1.30  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US 08/915,136  
 FILING DATE:  
 CLASSIFICATION:  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: 08/480,604  
 FILING DATE:  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 08/405,496  
 FILING DATE: 16-MAR-1995  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 08/329,154  
 FILING DATE: 25-OCT-1994  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 08/161,907  
 FILING DATE: 02-DEC-1993  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 07/985,321  
 FILING DATE: 04-DEC-1992  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 07/429,791  
 FILING DATE: 31-OCT-1989  
 ATTORNEY/AGENT INFORMATION:  
 NAME: INGOLIA, DIANE E.  
 REGISTRATION NUMBER: 40,027  
 REFERENCE/DOCKET NUMBER: OPHD-01763  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: (415) 705-8410  
 TELEFAX: (415) 397-8338  
 INFORMATION FOR SEQ ID NO: 23:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 438 amino acids  
 TYPE: amino acid  
 TOPOLOGY: linear  
 MOLECULE TYPE: protein  
 US-08-915-136-23

Query Match 35.4%; Score 831.5; DB 4; Length 438;  
 Best Local Similarity 40.0%; Pred. No. 4.7e-57;  
 Matches 180; Conservative 83; Mismatches 150; Indels 37; Gaps 10;

QY 4 KYNEILLNLTILNRYKDNLDLSCYGAKEVYDGVNLDKNOFKLTSSANSKIRVT 61  
 DB 10 EYKINILNLTILNRYKDNLDLSCYGAKEVYDGVNLDKNOFKLTSSANSKIRVT 69  
 QY 62 QNONTIFNSVFLDSFVSWIRIPKYNKNDGIONTHREYTIINCMKNNSGKISIRGNRII 121  
 DB 70 LKNAIVNMSYENFSTFWIRIPKYNF--SISLNNEYTIINCMNNSGKISIRGNRII 126  
 QY 122 WTLIDNGKTSVFEVNIREDISEYINRFFVTIINN-LNNAKIYINKGLESNTDIDKI 180  
 DB 127 WTLQTOEIKQVVFVKYSQMINISDIYINRFFVTIINN-LNNAKIYINKGLESNTDIDKI 186  
 QY 181 REVANGELIIFKLDGIDRTQFIWMKYFSTFNTLSQSNIEERYKIQSYSEYKDFWGNP 240

Db 187 GNTHASNNMFKLDGCRDTHRYIWKIFNFKELNEKEIKDLYNQNSGILKDFWGDY 245  
QY 241 LMYNKYYMFMAGNKNYSIKLKK-----DSPVGEILTRSKYNQNSKYINRYDLYIG 291  
Db 247 LQYDKPYMLNLYDPNKGVDVNVGIRGYWMLKPGRSVMTNLYLSS-----LYRG 299  
QY 292 EKTIIRKNSQINDIVRKEDYIYLDFFNLNOEWRYTYKYFKKEEKLFLAPISDS 351  
Db 300 TKFIIRKYSAGN--KDNVNRNDRVYVNVVKNKRYLATNASQAGVEKILSALEIPDV 357  
QY 352 ELYNTIQIKEYDEQP--TYSQCLLFKKDEESTDEIGLIGIHRFYESGIVFEYKDYFCISK 410  
Db 358 NLQGVVYMKSKNDGGITNCKM--NLQDNGNDIGFIGHQFNNTA-----KLVASN 407  
QY 411 WYLUKEVRKPYNLKLCGNWQFIPKDEGWE 440  
Db 408 WYLRQIERS--SRTLGSWEFIPVDDGWE 435  
RESULT 5  
US-08-480-604A-26  
Sequence 26, Application US/08405496A  
Patent No. 5736139  
GENERAL INFORMATION:  
APPLICANT: KINK, JOHN A.  
APPLICANT: THALLEY, BRUCE S.  
APPLICANT: PADHYE, NISHA V.  
APPLICANT: FIRCA, JOSEPH R.  
APPLICANT: STAFFORD, DOUGLAS C.  
TITLE OF INVENTION: VACCINE AND ANTITOXIN FOR TREATMENT AND  
PREVENTION OF C. DIFFICILE DISEASE  
NUMBER OF SEQUENCES: 32  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: MEDLEN & CARROLL, LLP  
STREET: 220 MONTGOMERY STREET, SUITE 2200  
CITY: SAN FRANCISCO  
STATE: CALIFORNIA  
COUNTRY: UNITED STATES OF AMERICA  
ZIP: 94104  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent in Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/480,604A  
FILING DATE: 07-JUN-1995  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/422,711  
FILING DATE: 14-APR-1995  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/405,496  
FILING DATE: 16-MAR-1995  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/329,154  
FILING DATE: 25-OCT-1994  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/161,907  
FILING DATE: 02-DEC-1993  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/985,321  
FILING DATE: 04-DEC-1992  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/429,791  
FILING DATE: 31-OCT-1989  
ATTORNEY/AGENT INFORMATION:  
NAME: INGOLIA, DIANE E.  
REGISTRATION NUMBER: 40,027  
REFERENCE/DOCKET NUMBER: OPHD-01763  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 705-8410

TELEFAX: (415) 397-8338  
INFORMATION FOR SEQ ID NO: 26:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 462 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
US-08-480-604A-26  
Query Match 35.4%; Score 831.5; DB 1; Length 462;  
Best Local Similarity 40.0%; Pred No. 5e-57;  
Matches 180; Conservative 83; Mismatches 150; Indels 37; Gaps 10;  
QY 4 KYNSEILNIIILNRYKDNLDLGYGAKVEYDGVELN--DKNQFKLTSSANSKIRVT 61  
Db 34 EYIKNIINTSILNRYESNHLDSLRYASKINIGSKVNFDPIDKNQIQLFNLESSKIEVI 93  
QY 62 QNQNIIIFNSVFLDFSVFWIRIPKYKNDGIQNYIHNEYTIINCNNKNSGKISIRGNRII 121  
Db 94 LKNAIVNSMIENFSTFWIRIPKYN---SISLNNEYTIINCNNKNSGKISIRGNRII 150  
QY 122 WTLIDINGTKSYFFFEYNIREDISEYINRWFVTTNN--LNNAKIYINGKLESNTDIKDI 180  
Db 151 WTLQDTQETKQVVFYKYSQMINISDYINRWFVTTNNLNNLSKIYINGRLIDQKPISNL 210  
QY 181 REVIANGEIIFKLDGIDIDTQFTWKYFSIFNTELSOSNIERYKIQSYSEYLDKDFWGNP 240  
Db 211 GNTHASNNMFKLDGCRDTHRYIWKIFNFKELNEKEIKDLYNQNSGILKDFWGDY 270  
QY 241 LMYNKYYMFMAGNKNYSIKLKK-----DSPVGEILTRSKYNQNSKYINRYDLYIG 291  
Db 271 LQYDKPYMLNLYDPNKGVDVNVGIRGYWMLKPGRSVMTNLYLSS-----LYRG 323  
QY 292 EKTIIRKNSQINDIVRKEDYIYLDFFNLNOEWRYTYKYFKKEEKLFLAPISDS 351  
Db 324 TKFIIRKYSAGN--KDNVNRNDRVYVNVVKNKRYLATNASQAGVEKILSALEIPDV 381  
QY 352 ELYNTIQIKEYDEQP--TYSQCLLFKKDEESTDEIGLIGIHRFYESGIVFEYKDYFCISK 410  
Db 382 NLQGVVYMKSKNDGGITNCKM--NLQDNGNDIGFIGHQFNNTA-----KLVASN 431  
QY 411 WYLUKEVRKPYNLKLCGNWQFIPKDEGWE 440  
Db 432 WYLRQIERS--SRTLGSWEFIPVDDGWE 459  
RESULT 6  
US-08-405-496A-26  
Sequence 26, Application US/08405496A  
Patent No. 5919665  
GENERAL INFORMATION:  
APPLICANT: WILLIAMS, JAMES A.  
TITLE OF INVENTION: VACCINE FOR CLOSTRIDIUM BOTULINUM  
TITLE OF INVENTION: NEUROTOXIN  
NUMBER OF SEQUENCES: 30  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: MEDLEN & CARROLL, LLP  
STREET: 220 MONTGOMERY STREET, SUITE 2200  
CITY: SAN FRANCISCO  
STATE: CALIFORNIA  
COUNTRY: USA  
ZIP: 94104  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent in Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/405,496A  
FILING DATE: 16-MAR-1995  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/329,154  
TELEPHONE: (415) 705-8410

FILING DATE: 25-OCT-1994  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/161,907  
FILING DATE: 02-DEC-1993  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/985,321  
FILING DATE: 04-DEC-1992  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/429,791  
FILING DATE: 31-OCT-1989  
ATTORNEY/AGENT INFORMATION:  
NAME: INGOLIA, DIANE E.  
REGISTRATION NUMBER: 40,027  
REFERENCE/DOCKET NUMBER: OPHD-01308  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 705-8410  
TELEFAX: (415) 397-8338  
INFORMATION FOR SEQ ID NO: 26:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 462 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
US-08-405-496A-26

Query Match 35.4%; Score 831.5; DB 2; Length 462;  
Best Local Similarity 40.0%; Pred. No. 5e-57;  
Matches 180; Conservative 83; Mismatches 150; Indels 37; Gaps 10;

4 KYNSEILNLIILRYKDNLDLSYGAKVEYDGVLELN--DKNQFKLTSSANSKIRVT 61  
34 EYKNIINTSILNRVESNLIDLSYASKINIGSKVNPDPDKNQIQLFNLESSKIEVI 93  
62 QNQNIIFNSVFLDFSVFWRIRPKYKNDGQNTQYIHNEYTIINCMMKNSGWKISIRGNRII 121  
94 LKNAIVNMYENFSTFWIRIPKYN---SISLNNEYTIINCMMNSGWKVSLEYGEII 150  
122 WTLTDINGKTKSVFEYNIREDISEVINRFFVTINN--LNNAKIYINGKLESNTDIKI 180  
151 WTLQDTEIKQVVRVYKYSQMINISDVINRWFVTIINNRLNNSKIYINGRLDQKPSNL 210  
181 REVITANGELIFKLDGIDRTQFTWIKYFISFNTELQSNIERYKIQSYSEYKLPFGWNP 240  
211 GNIHASNIMFKLDGCRDTHRYIWKYFNLFDELKEKEIKDLYDNQSNGLKDFWGDY 270  
241 LMYNKEYMFNAGNKNYSYIKLKK-----DSPYGEILITRSKYNQNSKIYINRDLIG 291  
271 LOYDKPYMLNDPNKYVNVNNGVIRGYMLKPGRGVMTINYLNS-----LYRG 323  
292 EKFTIRKNSQSINDDIVKEDYIYLDNFNLNQWRVITYYFKKEEKLFLAPISDS 351  
324 TKFTIRKYASGN--KDNIVRNDRVINVVYKNEYRLATNASQAGVERKILSALEIPDVG 381  
352 ELYNTIOIKEYDEOP-TYSCOLLFKKDEESTDEIGLIGIHRFYESGIVPEEYKDYFCISK 410  
382 NLSQVYVMSKNDGQINCKM--NQDNNGNDIGIGIHFQFNIA-----KLIVASN 431  
411 WYLKVRKPYNLKGCNWOQIFPKDEGWE 440  
432 WYNRQIERS--SRTLGCSWEIFPVDGWGE 459

RESULT 7  
US-08-915-136-26  
Sequence 26, Application US/08915136  
Patent No. 6290960  
GENERAL INFORMATION:  
APPLICANT: KINK, JOHN A.  
APPLICANT: THALLEY, BRUCE S.  
APPLICANT: PADHYE, NISHA V.  
APPLICANT: FIRCA, JOSEPH R.  
APPLICANT: STAFFORD, DOUGLAS C.  
TITLE OF INVENTION: VACCINE AND ANTITOXIN FOR TREATMENT AND

TITLE OF INVENTION: PREVENTION OF C. DIFFICILE DISEASE  
NUMBER OF SEQUENCES: 32  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: MEDLEN & CARROLL, LLP  
STREET: 220 MONTGOMERY STREET, SUITE 2200  
CITY: SAN FRANCISCO  
STATE: CALIFORNIA  
COUNTRY: UNITED STATES OF AMERICA  
ZIP: 94104  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/915,136  
FILING DATE:  
CLASSIFICATION:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 08/480,604  
FILING DATE:  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/405,496  
FILING DATE: 16-MAR-1995  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/329,154  
FILING DATE: 25-OCT-1994  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/161,907  
FILING DATE: 02-DEC-1993  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/985,321  
FILING DATE: 04-DEC-1992  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/429,791  
FILING DATE: 31-OCT-1989  
ATTORNEY/AGENT INFORMATION:  
NAME: INGOLIA, DIANE E.  
REGISTRATION NUMBER: 40,027  
REFERENCE/DOCKET NUMBER: OPHD-01763  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 705-8410  
TELEFAX: (415) 397-8338  
INFORMATION FOR SEQ ID NO: 26:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 462 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
US-08-915-136-26

Query Match 35.4%; Score 831.5; DB 4; Length 462;  
Best Local Similarity 40.0%; Pred. No. 5e-57;  
Matches 180; Conservative 83; Mismatches 150; Indels 37; Gaps 10;

4 KYNSEILNLIILRYKDNLDLSYGAKVEYDGVLELN--DKNQFKLTSSANSKIRVT 61  
34 EYKNIINTSILNRVESNLIDLSYASKINIGSKVNPDPDKNQIQLFNLESSKIEVI 93  
62 QNQNIIFNSVFLDFSVFWRIRPKYKNDGQNTQYIHNEYTIINCMMKNSGWKISIRGNRII 121  
94 LKNAIVNMYENFSTFWIRIPKYN---SISLNNEYTIINCMMNSGWKVSLEYGEII 150  
122 WTLTDINGKTKSVFEYNIREDISEVINRFFVTINN--LNNAKIYINGKLESNTDIKI 180  
151 WTLQDTEIKQVVRVYKYSQMINISDVINRWFVTIINNRLNNSKIYINGRLDQKPSNL 210  
181 REVITANGELIFKLDGIDRTQFTWIKYFISFNTELQSNIERYKIQSYSEYKLPFGWNP 240  
211 GNIHASNIMFKLDGCRDTHRYIWKYFNLFDELKEKEIKDLYDNQSNGLKDFWGDY 270  
241 LMYNKEYMFNAGNKNYSYIKLKK-----DSPYGEILITRSKYNQNSKIYINRDLIG 291

Db 271 LOYDKPYMLNLYDPKNYVDVNNVGIKRGVYMLKGRGSMVTNIIYLNSS-----LYRG 323  
QY 292 EKFIIRKSNSSINDDIVRKEDYIYLDFFNLNQENRVTYKYFKKEEKLFLAPISDSD 351  
Db 324 TRFIILKYASGN--KDNIVRNDRYIINVVYKKNRYLATNASQAGVEKILSALEIPDVG 381  
QY 352 ELVNTIQIKEYDEQP--TYSQOLLFKKDESDDEIGLIGHRFYSGIVFEEYKDYFCISK 410  
Db 382 NLSQVVMKSKNDQGITNCKM--NLQDNGNDIGFIGHQFNNTIA-----KLVASN 431  
QY 411 WYLKVKRXPYMLKLGCONWQFIPKDEGTE 440  
Db 432 WYNQIERS--SRTLGSWEFIPVDDGWGE 459

RESULT 8  
US-08-480-604A-28  
Sequence 28, Application US/08480604A  
Patent No. 5736139  
GENERAL INFORMATION:  
APPLICANT: KINK, JOHN A.  
APPLICANT: KINK, JOHN A.  
APPLICANT: THALLEY, BRUCE S.  
APPLICANT: PADHYE, NISHA V.  
APPLICANT: FIRCA, JOSEPH R.  
APPLICANT: STAFFORD, DOUGLAS C.  
TITLE OF INVENTION: VACCINE AND ANTITOXIN FOR TREATMENT AND PREVENTION OF C. DIFFICILE DISEASE  
NUMBER OF SEQUENCES: 32  
CORRESPONDENCE ADDRESSES:  
ADDRESSEE: MEDLEN & CARROLL, LLP  
STREET: 220 MONTGOMERY STREET, SUITE 2200  
CITY: SAN FRANCISCO  
STATE: CALIFORNIA  
COUNTRY: UNITED STATES OF AMERICA  
ZIP: 94104

COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/480,604A  
FILING DATE: 07-JUN-1995  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/422,711  
FILING DATE: 14-APR-1995  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/405,496  
FILING DATE: 16-MAR-1995  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/329,154  
FILING DATE: 25-OCT-1994  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/161,907  
FILING DATE: 02-DEC-1993  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/985,321  
FILING DATE: 04-DEC-1992  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 07/429,791  
FILING DATE: 31-OCT-1989  
ATTORNEY/AGENT INFORMATION:  
NAME: INGOLIA, DIANE E.  
REGISTRATION NUMBER: 40,027  
REFERENCE/DOCKET NUMBER: OPD-01763  
TELEPHONE: (415) 705-8410  
TELEFAX: (415) 397-8338  
INFORMATION FOR SEQ ID NO: 28:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 1296 amino acids  
TYPE: amino acid

TOPOLOGY: linear  
MOLECULE TYPE: protein  
US-08-480-604A-28  
Query Match 35.48; Score 831.5; DB 1; Length 1296;  
Best Local Similarity 40.0%; Pred. No. 1.9e-56;  
Matches 180; Conservative 83; Mismatches 150; Indels 37; Gaps 10;  
QY 4 KYNSILNIIILNRYKDNLDLSGKGVYDGVELN--DRKQFKLTSSANSKIRVT 61  
Db 868 EYKNIINTSILNRYESHLIDLRYASKINIGSKVNFDPIDKNQQLFNLESSKIEVI 927  
QY 62 QNQNIFLVSFLDFSVFWRIPKPKNDGIONYHNEYTIINCNNKNSGKISIRGNRII 121  
Db 928 LKNAIVNSMYENFTSWIRIPYFN--SISLNNEYTIINCNNKNSGKISIRGNRII 984  
QY 122 WYLDINGKTSVFEYINREDISEYINRWFFVTITNN--LNNAKIYINGKLESNTDIKDI 180  
Db 985 WYLDQTOELKQVRFVSKYSOMINISDYINRWFFVTITNNRLNNSKIYINGRLIDQKPI 1044  
QY 181 REVINGEELFKDGDIDRTQFIWMKYFSIFTELQSNIERYKIQSYSEYKDFWGNP 240  
Db 1045 GNIHASNNIMFKDGRDTHRYIWKYFNLDFKELNEKIDLYDNOSNGILKDFWGDY 1104  
QY 241 LMYNKEYMFNAGNSYIKLKK-----DSPVGBELTRSKYNONSKYINRYDLYIG 291  
Db 1105 LOYDKPYMLNLYDPKNYVDVNNVGIKRGVYMLKGRGSMVTNIIYLNSS-----LYRG 1157  
QY 292 EKFIIRKSNSSINDDIVRKEDYIYLDFFNLNQENRVTYKYFKKEEKLFLAPISDSD 351  
Db 1158 TRFIILKYASGN--KDNIVRNDRYIINVVYKKNRYLATNASQAGVEKILSALEIPDVG 1215  
QY 352 ELVNTIQIKEYDEQP--TYSQOLLFKKDESDDEIGLIGHRFYSGIVFEEYKDYFCISK 410  
Db 1216 NLSQVVMKSKNDQGITNCKM--NLQDNGNDIGFIGHQFNNTIA-----KLVASN 1265  
QY 411 WYLKVKRXPYMLKLGCONWQFIPKDEGTE 440  
Db 1266 WYNQIERS--SRTLGSWEFIPVDDGWGE 1293

RESULT 9  
US-08-405-496A-28  
Sequence 28, Application US/08405496A  
Patent No. 5919665  
GENERAL INFORMATION:  
APPLICANT: WILLIAMS, JAMES A.  
TITLE OF INVENTION: VACCINE FOR CLOSTRIDIUM BOTULINUM  
TITLE OF INVENTION: NEUROTOXIN  
NUMBER OF SEQUENCES: 30  
CORRESPONDENCE ADDRESSES:  
ADDRESSEE: MEDLEN & CARROLL, LLP  
STREET: 220 MONTGOMERY STREET, SUITE 2200  
CITY: SAN FRANCISCO  
STATE: CALIFORNIA  
COUNTRY: USA  
ZIP: 94104  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/405,496A  
FILING DATE: 16-MAR-1995  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/329,154  
FILING DATE: 25-OCT-1994  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US 08/161,907  
FILING DATE: 02-DEC-1993  
PRIOR APPLICATION DATA:



QY 352 ELYNTIQIKEYDEQ-TYSQCLLFKKDESTDEIGLIGHREFYSGIVFEYKYDYFCISK 410  
Db 1216 NLSQVVMESKNDQGITNKCKM-NLQDNGNDIGFIGHQFNIA-----KLVASN 1365  
QY 411 WYKVEKRPYNLKGCCWQFIPKDEGTE 440  
Db 1266 WYNQRIERS--SRTLGCSWEFIPVDDGWGE 1293

RESULT 11  
US-07-618-312A-2  
; Sequence 2, Application US/07618312A  
; Patent No. 5389540  
; GENERAL INFORMATION:  
; APPLICANT: Makoff Dr, Andrew J  
; APPLICANT: Romanos Dr, Michael A  
; APPLICANT: Clare Dr, Jeffrey J  
; APPLICANT: Fairweather Dr, Neil F  
; TITLE OF INVENTION: VACCINES  
; NUMBER OF SEQUENCES: 13  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: 14th Floor  
; STREET: 2200 Clarendon Boulevard,  
; CITY: Arlington,  
; STATE: Virginia  
; COUNTRY: U.S.A.  
; ZIP: 22201  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/07/618,312A  
; FILING DATE: 19910516  
; CLASSIFICATION: 424  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: GB 8926832.0  
; FILING DATE: 28-NOV-1989  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: GB 9006097.1  
; FILING DATE: 17-MAR-1990  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Crawford Mr, Arthur R  
; REGISTRATION NUMBER: 25,327  
; REFERENCE/DOCKET NUMBER: 510-51  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: 0101 703 8750400  
; TELEFAX: 0101 703 5253468  
; TELEX: 200797 NIXN UR  
; INFORMATION FOR SEQ ID NO: 2:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 432 amino acids  
; TYPE: AMINO ACID  
; TOPOLOGY: linear  
; MOLECULE TYPE: protein  
; US-07-618-312A-2

Query Match 25.3%; Score 595; DB 1; Length 452;  
Best Local Similarity 32.2%; Pred. No. 1.2e-38;  
Matches 142; Conservative 88; Mismatches 183; Indels 28; Gaps 12;  
QY 14 ILNRYKNNLIDISGVCAYVGVDEL---NDKNQFKLTSSANSKIRVTQNONIIFEN 69  
Db 23 IUNLDINDIDISGFNSVITPDQALVPGINGK-AIHLVNESSESVIVHKMDIEN 81  
QY 70 SVFLDFSVFWIRPKYKNDGIONYIHNEVITINCNN-----SGWKISIRGNRIITWL 124  
Db 82 DMFNFTVSWLRVPKVSASHLEQYGTNEYSLISSMKKHSLSIGSGWSVSLKGNLITL 141  
QY 125 IDINGTKSVFPEINIRIDISEYI-NWFFVTIINN-LNNAKIYINGKLESNTDKIDRE 182

Db 142 KDSAGEVQIOTFR-DLPDKFNAYLANKWVFITITNDRLSANLYINGVLMGSAEITGLGA 200  
QY 183 VTANGEILFKLDGIDIRTOFTWIKYFIFIPNTELSQSMIEERYKIQSYSEYVKDQWGNPLM 242  
Db 201 IREDNNITLKLDRCNNNQYVSIDKFRIFCKALNPKKEIEKLYTSLYITELRDFWGNPLR 260  
QY 243 YNKEYMFMNAGNKNYSYIKLKKDSPVGEILTRSKYNQNSKYINRYDLYIGEKFTIRRSKNS 302  
Db 261 YDTEYLLPFASSKDVQLKNIITDVMYLTNAPSYTNGKLNIIYRRLYNGLKFIKRYTPN 320  
QY 303 QSINDIVRKYDYIYLDFFNLNQEWRYTY-----KYFKKEEKLFLAPISDSDELYNTIQ 358  
Db 321 NEI-DSFVKSQDFIKL-YVSYNNNEHIVGYPKDGNFANFLDRILRVGYNAPGIPLYKKME 378  
QY 359 IKEYDEQPTYSCQLLFKKDESTDEIGLIGHREFYSGIVFEYKYDYFCISKWYLKEVVR 418  
Db 379 AVKLRLDKTYSVQLKLYDDKNAS--LGLVGTH--NGQIGNDPNRKDLILIASNWMYFNLKD 433  
QY 419 KPYNLKLGNCWQFIPKDEGWT 439  
Db 434 K-----ILGCDWYFVPTDEGWT 450  
RESULT 12  
US-08-280-228-2  
; Sequence 2, Application US/08280228  
; Patent No. 5571694  
; GENERAL INFORMATION:  
; APPLICANT: Makoff Dr, Andrew J  
; APPLICANT: Romanos Dr, Michael A  
; APPLICANT: Clare Dr, Jeffrey J  
; APPLICANT: Fairweather Dr, Neil F  
; TITLE OF INVENTION: VACCINES  
; NUMBER OF SEQUENCES: 13  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: NIXON & VANDERHVE P.C.  
; STREET: 1100 No. 5571694th Glebe Road  
; CITY: Arlington,  
; STATE: Virginia  
; COUNTRY: U.S.A.  
; ZIP: 22201-4714  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patent In Release #1.0, Version #1.25  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/280,228  
; FILING DATE: 25-JUL-1994  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: US 07/618,312  
; FILING DATE: 27-NOV-1990  
; CLASSIFICATION: 435  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: GB 8926832.0  
; FILING DATE: 28-NOV-1989  
; PRIOR APPLICATION DATA:  
; APPLICATION NUMBER: GB 9006097.1  
; FILING DATE: 17-MAR-1990  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Wilson, Mary J.  
; REGISTRATION NUMBER: 32,955  
; REFERENCE/DOCKET NUMBER: 117-163  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (703) 816-4000  
; TELEFAX: (703) 816-4100  
; TELEX: 200797 NIXN UR  
; INFORMATION FOR SEQ ID NO: 2:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 452 amino acids  
; TYPE: amino acid  
; TOPOLOGY: linear



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; MOLECULE TYPE: protein
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; 321 NEI-DSFVKSGDFIKL-YVSYNNEHIVGPKDGNFNNLDRILRVGYNAPGIPLYKME 378
; 359 IKEYDEQPTYSQQLLFKKDEESTDEIGLIGHFYSGIVFEYKDYFCISKWYLKEVR 418
; 379 AVKLRLDKTYSVQLKLYDDKNAS--LGLVGT--NGQIGNDPNRDLIIASWYFNHLKD 433
; 419 KPNYKLGCCNQFIPKDEGWT 439
; 434 K-----ILGCDWYFVPTDEGWT 450
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; RESULT 13
; US-07-618-312A-4
; Sequence 4, Application US/07618312A
; Patent No. 5389540
; GENERAL INFORMATION:
; APPLICANT: Makoff Dr, Andrew J
; APPLICANT: Romanos Dr, Michael A
; APPLICANT: Clare Dr, Jeffrey J
; APPLICANT: Fairweather Dr, Neil F
; TITLE OF INVENTION: VACCINES
; NUMBER OF SEQUENCES: 13
; CORRESPONDENCE ADDRESS:
; ADDRESS: 14th Floor
; STREET: 2200 Clarendon Boulevard,
; CITY: Arlington,
; STATE: Virginia
; COUNTRY: U.S.A.
; ZIP: 22201
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/618,312A
; FILING DATE: 19910516
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: GB 8926832.0
; FILING DATE: 28-NOV-1989
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: GB 9006097.1
; FILING DATE: 17-MAR-1990
;
; ATTORNEY/AGENT INFORMATION:
; NAME: Crawford Mr, Arthur R
; REGISTRATION NUMBER: 25327
; REFERENCE/DOCKET NUMBER: 510-51
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 0101 703 8750400
; TELEFAX: 0101 703 5253468
; TELEX: 200797 NIXN UR
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 452 amino acids
; TYPE: AMINO ACID
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-07-618-312A-4
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; Query Match 25.3%; Score 594; DB 1; Length 452;
; Best Local Similarity 32.0%; Pred. No. 1.5e-38;
; Matches 141; Conservative 89; Mismatches 183; Indels 28; Gaps 12;
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; 201 IRENNITLKDRNNNNQVSDKFRIFCKALNPKIEKLYSITFLDRFNGNPLR 260
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; 261 YDTEYILIPVASSKQVQLKNITDYWLTNAPSYTNGKLNIIYRRLYNGLKFIIRKYN 320
; 303 QSIINDIVRKEDYIYLDFFNLQEWRYTY----KYFKKEEKLFLAPISDSDELYNTIQ 358
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; 359 IKEYDEQPTYSQQLLFKKDEESTDEIGLIGHFYSGIVFEYKDYFCISKWYLKEVR 418
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; 434 K-----ILGCDWYFVPTDEGWT 450
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; RESULT 14
; US-08-280-228-4
; Sequence 4, Application US/08280228
; Patent No. 5571694
; GENERAL INFORMATION:
; APPLICANT: Makoff Dr, Andrew J
; APPLICANT: Romanos Dr, Michael A
; APPLICANT: Clare Dr, Jeffrey J
; APPLICANT: Fairweather Dr, Neil F
; TITLE OF INVENTION: VACCINES
; NUMBER OF SEQUENCES: 13
; CORRESPONDENCE ADDRESS:
; ADDRESS: NIXON & VANDERHIVE P.C.
; STREET: 1100 No. 5571694th Glebe Road
; CITY: Arlington,
; STATE: Virginia
; COUNTRY: U.S.A.
; ZIP: 22201-4714
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk

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COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent In Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/280.228  
FILING DATE: 25-JUL-1994  
CLASSIFICATION: 435  
PRIORITY APPLICATION DATA:  
APPLICATION NUMBER: US 07/618,312  
FILING DATE: 27-NOV-1990  
CLASSIFICATION: 435  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: GB 8926832.0  
FILING DATE: 28-NOV-1989  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: GB 9006097.1  
FILING DATE: 17-MAR-1990  
ATTORNEY/AGENT INFORMATION:  
NAME: Wilson, Mary J.  
REGISTRATION NUMBER: 32,955  
REFERENCE/DOCKET NUMBER: 117-163  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (703) 816-4000  
TELEFAX: (703) 816-4100  
TELEX: 200797 NIXN UR  
INFORMATION FOR SEQ ID NO: 4:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 452 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
US-08-280-228-4

Query Match 25.3%; Score 594; DB 1; Length 452;  
Best Local Similarity 32.0%; Pred. No. 1.5e-38;  
Matches 141; Conservative 89; Mismatches 183; Indels 28; Gaps 12;

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23 ILNLDINNDIISDISGNSSVITPDQALVPGINGK-AIHLVNNESSEVIVHKAMDIEYN 81  
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201 IRENNITLKDRNNNNQVSDIKFRICKALNPKEIEKLTYSITFLDFWGNPLR 260  
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RESULT 15  
US-08-668-381A-5  
; Sequence 5, Application US/08668381A

Patent No. 5780024  
GENERAL INFORMATION:  
APPLICANT: BROWD, Robert H.  
APPLICANT: Fishman, Paul S.  
APPLICANT: Francis, Jonathan W.  
APPLICANT: Hosler, Betsy A.  
TITLE OF INVENTION: SUPEROXIDE DISMUTASE/TETANUS TOXIN  
TITLE OF INVENTION: FRAGMENT C HYBRID PROTEIN  
NUMBER OF SEQUENCES: 6  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Fish & Richardson P.C.  
STREET: 225 Franklin Street  
CITY: Boston  
STATE: MA  
COUNTRY: USA  
ZIP: 02110-2804  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent In Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/668.381A  
FILING DATE: 21-JUN-1996  
CLASSIFICATION: 514  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: 60/000.473  
FILING DATE: 23-JUN-1995  
ATTORNEY/AGENT INFORMATION:  
NAME: Clark, Paul T.  
REGISTRATION NUMBER: 30,154  
REFERENCE/DOCKET NUMBER: 00786/269001  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 617/542-5070  
TELEFAX: 617/542-8906  
TELEX: 200154  
INFORMATION FOR SEQ ID NO: 5:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 618 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
US-08-668-381A-5

Query Match 25.3%; Score 594; DB 1; Length 618;  
Best Local Similarity 32.0%; Pred. No. 2.2e-38;  
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367 IRENNITLKDRNNNNQVSDIKFRICKALNPKEIEKLTYSITFLDFWGNPLR 426  
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Search completed: November 1, 2002, 08:17:44  
Job time : 30 secs

GenCore version 5.1.3  
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OM protein - protein search, using sw model

Run on: November 1, 2002, 08:17:28 ; Search time 31 Seconds

(without alignments)  
196.854 Million cell updates/sec

Title: US-09-910-186a-8

Perfect score: 2350

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Scoring table: BLOSUM62

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Searched: 90412 seqs, 13869272 residues

Total number of hits satisfying chosen parameters: 90412

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published Applications-AA:\*

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- 2: /cgn2.6/ptodata/2/pubpaa/PCT\_NEW\_PUB.pep.\*
- 3: /cgn2.6/ptodata/2/pubpaa/US06\_NEW\_PUB.pep.\*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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3	732	31.1	431	8	US-08-981-087A-1
4	319	13.5	144	8	US-08-981-087A-2
5	284.5	12.1	144	8	US-08-981-087A-3
6	149.5	6.4	1086	10	US-09-924-154-15
7	149	6.3	143	8	US-08-981-087A-4
8	144	6.1	996	10	US-09-815-242-5251
9	144	6.1	1009	10	US-09-815-242-12141
10	137.5	5.9	476	10	US-09-774-414-3
11	121	5.1	609	10	US-09-815-242-13683
12	121	5.1	1421	10	US-09-924-154-13
13	112.5	4.8	406	10	US-09-765-205-8
14	110.5	4.7	1093	10	US-09-801-368-392
15	110	4.7	751	10	US-09-881-752A-280
16	110	4.7	841	10	US-09-815-242-5779
17	110	4.7	841	10	US-09-815-242-12751
18	110	4.7	866	10	US-09-815-242-11373
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20	109.5	4.7	1018	10	US-09-815-242-5797	Sequence 5797, Ap
21	109.5	4.7	1018	10	US-09-815-242-12838	Sequence 12838, A
22	108	4.6	1143	10	US-09-924-154-14	Sequence 14, Appl
23	107.5	4.6	773	12	US-10-067-385-8	Sequence 8, Appl
24	107	4.6	347	10	US-09-816-028A-17	Sequence 17, Appl
25	107	4.6	492	10	US-09-737-178-21	Sequence 21, Appl
26	105.5	4.5	358	10	US-09-861-451A-50	Sequence 50, Appl
27	105.5	4.5	436	10	US-09-815-242-5800	Sequence 5800, Ap
28	105.5	4.5	436	10	US-09-815-242-12846	Sequence 12846, A
29	105.5	4.5	660	10	US-09-881-752A-22	Sequence 22, Appl
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34	104.5	4.4	1349	10	US-09-741-669-397	Sequence 397, App
35	104.5	4.4	1349	10	US-09-815-242-5898	Sequence 5898, Ap
36	104.5	4.4	1349	10	US-09-815-242-13137	Sequence 13137, A
37	104	4.4	990	12	US-10-047-676A-7	Sequence 7, Appl
38	102	4.3	389	10	US-09-816-028A-34	Sequence 34, Appl
39	102	4.3	835	10	US-09-801-374-22	Sequence 22, Appl
40	101.5	4.3	2026	10	US-09-801-368-86	Sequence 86, Appl
41	101	4.3	555	8	US-08-808-031A-31	Sequence 31, Appl
42	101	4.3	586	8	US-08-808-031A-28	Sequence 28, Appl
43	100.5	4.3	516	10	US-09-986-676A-2	Sequence 2, Appl
44	100.5	4.3	516	10	US-09-971-811-2	Sequence 11, Appl
45	100.5	4.3	972	10	US-09-924-154-16	Sequence 16, Appl

ALIGNMENTS

RESULT 1  
US-09-726-949A-1  
; Sequence 1, Application US/09726949A  
; Patent No. US20020137886A1  
; GENERAL INFORMATION:  
; APPLICANT: Allergan, Inc.  
; APPLICANT: Lin, Wei-Jen  
; APPLICANT: Aoki, Kei-Roger  
; TITLE OF INVENTION: NEUROTOXINS WITH ENHANCED TARGET SPECIFICITY  
; FILE REFERENCE: 36121-20002.00  
; CURRENT APPLICATION NUMBER: US/09/726,949A  
; CURRENT FILING DATE: 2000-11-29  
; NUMBER OF SEQ ID NOS: 1  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 1  
; LENGTH: 1295  
; TYPE: PRT  
; ORGANISM: Clostridium botulinum  
US-09-726-949A-1

Query Match 35.4%; Score 831.5; DB 10; Length 1295;  
Best Local Similarity 40.0%; Pred. No. 6.1e-58;  
Matches 180; Conservative 83; Mismatches 150; Indels 37; Gaps 10;

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DB	927	LKNAIVNYSYENFSTFWIRIPKIFEN--SISLNREYTIINCMEENNSGKYSVLTNGEII	983
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DB	984	WTLQDTEIRQVRVFKSKQMINISDVINRWFVTIINRLNNSKIYINGRLIDQKPISNL	1043
QY	181	REVIANGEIIFKLDGIDRTOFIWMKYFTSIFNTELSQNIIEERYKQSYSEYKLFQWGNP	240
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Db 1265 WYNQIERS--SRTLGSWEFIPVDGWE 1292

RESULT 2  
US-09-288-326-9  
Sequence 9, Application US/09288326  
Patent No. US20010018049A1  
GENERAL INFORMATION:  
APPLICANT: Kei Roger Aoki  
APPLICANT: George Sachs  
TITLE OF INVENTION: Method and Compositions for the  
TREATMENT OF PANCREATITIS  
TITLE REFERENCE: 17282  
CURRENT APPLICATION NUMBER: US/09/288,326  
CURRENT FILING DATE: 1999-04-08  
NUMBER OF SEQ ID NOS: 11  
SOFTWARE: FastSeq for Windows Version 3.0  
SEQ ID NO 9  
LENGTH: 425  
TYPE: PRP  
ORGANISM: Clostridium botulinum  
US-09-288-326-9

Query Match 35.2%; Score 826.5; DB 10; Length 425;  
Best Local Similarity 40.2%; Pred. No. 4e-58;  
Matches 179; Conservative 82; Mismatches 147; Indels 37; Gaps 10;

QY 9 ILNNIILNRYKDNLDLSGYGAKVEYDGVELN--DRNQFKLTSSANSKIRVTONQNI 56  
Db 2 IINLSILNRYESNHLIDLSYASKINIGSKYVDFPDIDKQQLFNLESSKTEVILKXAI 61  
QY 67 IFNSVFLDFSVSWIRIPKYNQNGIQNYIHNEYTIINCMKNNGKISIRGNRIITWID 126  
Db 62 VYNSWYENFSFSEWIRIPKYN--SISLNNEYTIINCMKNNGKISIRGNRIITWID 118  
QY 127 INKTKSVFFEYNIREDISEYINRWFFVTITNN--LNNAKIYINGKLESNTDKIDREVA 185  
Db 119 TOELKQVRFKYSQMINISDYINRWIFVTITNNRNNSKIYINGRLIDQKP-SNLGN:HA 178  
QY 186 NGELIFKLDGIDIDTOFIWKYSIFNTELSQNSIEERYKIOSYSEYLDKDFWGNPLMYNK 245  
Db 179 SNIMEKLDGROTHRIWIKYNFLNFKELNEIKDLTDQNSGILKDFGDIYQYDK 238  
QY 246 EYMFENAGNKNYIKLKK-----DSPVGEILTRSKYNQNSKYINRYDLYIGKFII 296  
Db 239 PYMLNLYDPNKYVDYVNVGIRGMYLKGPRGSMVTNIYLNSS-----LYRGKFII 291  
QY 297 RKNSQSINDIVRKEDYLYLDFNINQEMRWYTYKYFKKBEKFLFAPISQSDLYNT 356  
Db 292 KKYASGN--KDNIVRNDRYVINVVKNEYRLATNASQAGVEKILSALEIPDVGNSLV 349  
QY 357 IOIKEYDEOP--TYSCLLFKKDEBDEIGLIGHRFYSGIVFEYKDYFCISKYLKE 415  
Db 350 VYMSKNDQGITNCKM--NLQDNGNDIGFIGHQFNNTA-----KLVASNWNQ 399  
QY 416 YARKPYNLKGCNQFIPKDEGWT 440  
Db 400 IERS--SRTLGSWEFIPVDGWE 422

Copyright from 10910186 on 05-05-2004

RESULT 3  
US-08-981-087A-1  
Sequence 1, Application US/08981087A  
Patent No. US20020081304A1  
GENERAL INFORMATION:  
APPLICANT: Elmore, Michael J.  
APPLICANT: Mauchline, Margaret L.  
APPLICANT: Minton, Nigel P.  
APPLICANT: Pasechnik, Vladimir A.  
APPLICANT: Titball, Richard W.  
TITLE OF INVENTION: TYPE F BOTULINUM TOXIN AND USE THEREOF  
NUMBER OF SEQUENCES: 6  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: NIXON & VANDERHYE P.C.  
STREET: 1100 No. US20020081304A1th Glebe Rd. 8th floor  
CITY: Arlington  
STATE: VA  
COUNTRY: USA  
ZIP: 22201-4741  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/981.087A  
FILING DATE: 27-MAY-1998  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: PCT/GB96/01409  
FILING DATE: 12-JUN-1996  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: GB 9511909.5  
FILING DATE: 12-JUN-1995  
ATTORNEY/AGENT INFORMATION:  
NAME: Crawford, Arthur R.  
REGISTRATION NUMBER: 25,327  
REFERENCE/DOCKET NUMBER: 124-688  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 703-816-4000  
TELEFAX: 703-816-4100  
INFORMATION FOR SEQ ID NO: 1:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 431 amino acids  
TYPE: amino acid  
STRANDEDNESS:  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-981-087A-1

Query Match 31.1%; Score 732; DB 8; Length 431;  
Best Local Similarity 35.2%; Pred. No. 1.2e-50;  
Matches 161; Conservative 88; Mismatches 149; Indels 60; Gaps 13;

QY 3 KYNSETIINLIINRYKDNLDLSGYGAKVEYDGVELN--DRNQFKLTSSANSKIRV 60  
Db 13 NKLYKKKIDNSILDMRYENKNKFFIDISYGSINISGVDVIYSTNRNQFGIYSSKPSVNI 72  
QY 61 TQONVIFNSVFLDFSVSWIRIPKYNQNGIQNYIHNEYTIINCMK--NNSGKISIRGNR 119  
Db 73 AQNDIITYNGRYQNFISFSEWIRIPKYN--KVNLNNEYTIIDICIRNNNSGKISILNKN 129  
QY 120 IITWIDINGKTSVFFEYNIREDISEYINRWFFVTITNN--LNNAKIYINGKLESNTDK 178  
Db 130 IITWIDTAGNKKLVFNQYQMSISDYINKWIFVTITNNRLGNSRIYINGNLDEKSI 189  
QY 179 DIREVIANGELIIFKLDGIDIDTOFIWKYSIFNTELSQNSIEERYKIOSYSEYLDKDFW 238  
Db 190 NLGDIHVSNDILFKVIGCND--TRYVGIRYFKVEDTELKGTETIETLYSDPDPFSLKDFW 248  
QY 239 NPLMYNEYMFNAGNKNYIKLKKDSPYGEILTRSKYNQNSKYINRYD----- 287

Db 249 NVILYNKRYLLNL-----LRTDKSI-----TQNSFLNINQOQGVYQKPNIF 291  
QY 288 ----LVIGKEFIIRKSNSSNT-DIVRKEDYIYLDFFNLNQEWVYTKYFKKEEKL 342  
Db 292 SNRLTYGVEVIRKNGSDTSDNTNFVRKNDLAVINVVDROVEVRYADISIAKPKII 351  
QY 343 FLAPISDSDELNTYTIQKEYDQPTYSQQLFKKDEESTDEIGLIGHRFVSEIVFEY 402  
Db 352 KLRTSNNSLQGIIVM----DSIGNNCTMNFQNN--NGGNIGLLGFH----- 394  
QY 403 KDFECISKVLEVRKPKYNLKLGNQWOFIPKDEGWE 440  
Db 395 SNNLVASSWYNNIRKN--TSSNGCFWFSISKEHGWE 430

RESULT 4

US-08-981-087A-2  
Sequence 2, Application US/08981087A  
Patent No. US20020081304A1  
GENERAL INFORMATION:  
APPLICANT: Elmore, Michael J.  
APPLICANT: Mauchline, Margaret L.  
APPLICANT: Minton, Nigel P.  
APPLICANT: Pasechnik, Vladimir A.  
APPLICANT: Titball, Richard W.  
TITLE OF INVENTION: TYPE F BOTULINUM TOXIN AND USE THEREOF  
NUMBER OF SEQUENCES: 6  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: NIXON & VANDERHYE P.C.  
STREET: 1100 No. US20020081304A1alth Glebe Rd. 8th floor  
CITY: Arlington  
STATE: VA  
COUNTRY: USA  
ZIP: 22201-4741  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent In Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/981,087A  
FILING DATE: 27-MAY-1998  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: PCT/GB96/01409  
FILING DATE: 12-JUN-1996  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: GB 9511909.5  
FILING DATE: 12-JUN-1995  
ATTORNEY/AGENT INFORMATION:  
NAME: Crawford, Arthur R.  
REGISTRATION NUMBER: 25,327  
REFERENCE/DOCKET NUMBER: 124-688  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 703-816-4000  
TELEFAX: 703-816-4100  
INFORMATION FOR SEQ ID NO: 2:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 144 amino acids  
TYPE: amino acid  
STRANDEDNESS:  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-981-087A-2

Query Match 13.5%; Score 318; DB 8; Length 144;  
Best Local Similarity 45.2%; Pred. No. 1.4e-18;  
Matches 61; Conservative 33; Mismatches 35; Indels 6; Gaps 3;  
QY 3 KYNSEILNIIILNRKDNLDLGGYAKVEYDGVEL--NDKNQFKLTSSANSKIRV 60  
Db 13 NKLYKKIKDINSILDYRNKFDIDIGYGSNTSDGVYISTNRNQQGIYSSKPSSEVNI 72

QY 61 TQONIIFNSEVDFSVFWIRIPRYKNDGTQNYIHNEYTIINCMK--NSGWKISIRGNR 119  
Db 73 AQNDIIYNGRYQNESISFWVRIPKRYFN---KVLNNEYTLIDICIRNNNSGWKISLYNK 129  
QY 120 IITWTLIDINGTKSV 134  
Db 130 IITWLODTAGNCKL 144  
RESULT 5  
US-08-981-087A-3  
Sequence 3, Application US/08981087A  
Patent No. US20020081304A1  
GENERAL INFORMATION:  
APPLICANT: Elmore, Michael J.  
APPLICANT: Mauchline, Margaret L.  
APPLICANT: Minton, Nigel P.  
APPLICANT: Pasechnik, Vladimir A.  
APPLICANT: Titball, Richard W.  
TITLE OF INVENTION: TYPE F BOTULINUM TOXIN AND USE THEREOF  
NUMBER OF SEQUENCES: 6  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: NIXON & VANDERHYE P.C.  
STREET: 1100 No. US20020081304A1alth Glebe Rd. 8th floor  
CITY: Arlington  
STATE: VA  
COUNTRY: USA  
ZIP: 22201-4741  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent In Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/981,087A  
FILING DATE: 27-MAY-1998  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: PCT/GB96/01409  
FILING DATE: 12-JUN-1996  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: GB 9511909.5  
FILING DATE: 12-JUN-1995  
ATTORNEY/AGENT INFORMATION:  
NAME: Crawford, Arthur R.  
REGISTRATION NUMBER: 25,327  
REFERENCE/DOCKET NUMBER: 124-688  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 703-816-4000  
TELEFAX: 703-816-4100  
INFORMATION FOR SEQ ID NO: 3:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 144 amino acids  
TYPE: amino acid  
STRANDEDNESS:  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
US-08-981-087A-3  
Query Match 12.1%; Score 284.5; DB 8; Length 144;  
Best Local Similarity 39.3%; Pred. No. 6e-16;  
Matches 59; Conservative 27; Mismatches 45; Indels 19; Gaps 4;  
QY 136 FEYNIREDISEYINRMFFVTITNN--LNNAKIYVINGKLESNTDIDKIREVIANGEIFKLD 194  
Db 2 FNTQMTISIDYINKWIFVTITNNRNGSRIVYINGMLIDEKISLNGDLHYSDNLFKIV 61  
QY 195 GDIDRTQFIWMKYFSINTSOSNTEERYKIQSYSEYKLDKFWGNPLMYNKYYMFWNAGN 254  
Db 62 GCND-IRYVGIRYFKVFEDELGTETETLYSDPEPDSILKDFWGNVLLYKRYLLNL-- 118  
QY 255 KNSYIKLKDPSVGEILTRSKYNQNSKYIN 284

2b 119 -----LRTDKSI-----TQNSFLN 133

RESULT 6

JS-09-924-154-15

Sequence 15, Application US/09924154

Patent No. US20020127241A1

GENERAL INFORMATION:

APPLICANT: Narum, David L.

APPLICANT: Sim, Kim L.

TITLE OF INVENTION: Anti-Plasmodium Compositions and Methods of Use

FILE REFERENCE: 05213-0465 43170-262105

CURRENT APPLICATION NUMBER: US/09/924,154

CURRENT FILING DATE: 2001-08-07

PRIOR APPLICATION NUMBER: US 60/233,525

PRIOR FILING DATE: 2000-08-07

NUMBER OF SEQ ID NOS: 17

SOFTWARE: Patent version 3.1

SEQ ID NO 15

LENGTH: 1086

TYPE: PRT

ORGANISM: Mammalian

US-09-924-154-15

Query Match 6.4%; Score 149.5; DB 10; Length 1086;

Best Local Similarity 20.5%; Pred. No. 0.00028;

Matches 89; Conservative 66; Mismatches 138; Indels 141; Gaps 21;

6 NSEILNIIILRYKD---NNLID--LSGYGAKVEYDGVGLNDKNQFKLTSSANSKIRVT 61

7 SKSIFPKVDISIKDFEKNKFDIYSLEYCGKKIKEMKWTCTDNQFK---SNNLCAPIR 63

62 QNQNIFNSVDFDSVFWIRPKYKNDGIONYTHNEYTIINCMKNNGWKISIRGNRII 121

64 RIQLCVNIIILFSENEYI---YKNDISNKP--KENILKAVKLESNLLIVOKHNN--- 114

122 WTLLIDNGTKSVFFEYINR--EDISEYINRWFFVTITNLLNNAKIVINGKLENTDIKD 179

115 -----EYSKLCDDI-----RASF-----D 130

180 IREVTANGIIFPKLGDIDRQFIMKYFSIFNTELS-----QSNIE----- 221

131 YGDIILIGRLIYK-----NNTDIYKEQFKIFNENNNELNDELNDELNDELNDELN 185

222 --ERYKIQSYSEVLKDF-----WGNPLMYKEYYMFNAGNK 255

186 WBEKYKEDIWEKTEHNDKFKTECKYFAKDEPQIVRWIEWSKQFLDERNYMLFTL--R 243

256 NSYIKLKDSPYGEILTRSKYNQNSKYINRYD---LYTGEKF--IRRKSSNSQSNDDIVR 311

244 NTYNEK-----NIHENNKOYKNQVNRKKEWTFLSNEFNKIFPERNVQIHSNIFK 296

312 --KEDYIYDFNLEQWERYTYKYKKEEKL-----FLAPISDSDELYNTIQIKEY 362

297 EYKENNVDFITGLN-----YBNFCKEKLPELVSAAYNKLKAPNAKSPRIYKS---KEH 348

363 DEQPTYSQCLLFKK 376

349 EESSVFGCKTKISK 362

RESULT 7

US-08-981-087A-4

Sequence 4, Application US/08981087A

Patent No. US20020081304A1

GENERAL INFORMATION:

APPLICANT: Elmore, Michael J.

APPLICANT: Mauchline, Margaret L.

APPLICANT: Minton, Nigel P.

APPLICANT: Pasechnik, Vladimir A.

APPLICANT: Titball, Richard W.

TITLE OF INVENTION: TYPE F BOTULINUM TOXIN AND USE THEREOF

NUMBER OF SEQUENCES: 5

CORRESPONDENCE ADDRESS:

ADDRESSEE: NIXON & VANDERHYE P.C.

STREET: 1100 No. US20020081304A1th Glebe Rd. 8th floor

CITY: Arlington

STATE: VA

COUNTRY: USA

ZIP: 22201-4741

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patent Release #1.0, Version #1.30

CURRENT APPLICATION NUMBER: US/08/981,087A

APPLICATION DATE: 27-MAY-1998

CLASSIFICATION: 424

PRIOR APPLICATION DATA:

APPLICATION NUMBER: PCT/GB96/01409

FILING DATE: 12-JUN-1996

PRIOR APPLICATION DATA:

APPLICATION NUMBER: GB 9511909.5

FILING DATE: 12-JUN-1995

ATTORNEY/AGENT INFORMATION:

NAME: Crawford, Arthur R.

REGISTRATION NUMBER: 25,327

REFERENCE/DOCKET NUMBER: 124-688

TELEPHONE: 703-816-4000

TELEFAX: 703-816-4100

INFORMATION FOR SEQ ID NO: 4:

SEQUENCE CHARACTERISTICS:

LENGTH: 143 amino acids

TYPE: amino acid

STRANDEDNESS:

TOPOLOGY: linear

MOLECULE TYPE: peptide

US-08-981-087A-4

Query Match 6.3%; Score 149; DB 8; Length 143;

Best Local Similarity 26.6%; Pred. No. 2.9e-05;

Matches 41; Conservative 28; Mismatches 65; Indels 20; Gaps 5;

QY 288 LVIGBKFIIRKSNQSQSN-DDIVRKEDYIYDFNLEQWERYTYKYKKEEKLFLAP 346

DB 8 LVIGVEIIRKNGSTDISNTDNFVRKNDLAYINVVDREYRLYADISIAKPEKIILIR 67

QY 347 ISDSDELYNTIQIKEYDQPTYSQCLLFKKDEESTDEIGLIGIHRFYESGIVFEYKDYF 406

DB 68 TSNNSNSLQIIVM---DSIGNNCTMNFQNN--NGGNLGLGFH-----SNNL 110

QY 407 CISKWLKEVKRKPYNLKLGNWOPIPKDEGWE 440

DB 111 VASSWYNNIRKN--TSSNGCFWSPISKEHGWE 142

RESULT 8

US-09-815-242-5251

Sequence 5251, Application US/09815242

Patent No. US20020061569A1

GENERAL INFORMATION:

APPLICANT: Haselbeck, Robert

APPLICANT: Ohlsen, Kari L.

APPLICANT: Zyskind, Judith W.

APPLICANT: Wall, Daniel

APPLICANT: Trawick, John D.

APPLICANT: Carr, Grant J.

APPLICANT: Yamamoto, Robert T.

APPLICANT: Xu, H. Howard

TITLE OF INVENTION: Identification of Essential Genes in

TITLE OF INVENTION: Prokaryotes

FILE REFERENCE: ELITRA.011A

CURRENT APPLICATION NUMBER: US/09/815,242

CURRENT FILING DATE: 2001-03-21

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; PRIOR APPLICATION NUMBER: 60/191,078
; PRIOR FILING DATE: 2000-03-21
; PRIOR APPLICATION NUMBER: 60/206,848
; PRIOR FILING DATE: 2000-05-23
; PRIOR APPLICATION NUMBER: 60/207,727
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: 60/242,578
; PRIOR FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; NUMBER OF SEQ ID NOS: 14110
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 5251
; LENGTH: 996
; TYPE: PRT
; ORGANISM: Staphylococcus aureus
US09-815-242-5251

Query Match          6.1%; Score 144; DB 10; Length 996;
Best Local Similarity 21.0%; Pred. No. 0.00071;
Matches 106; Conservative 82; Mismatches 155; Indels 162; Gaps 28;

QY 3 NKYNSEILNNIILNRYKD-----NNLIDLSGKGVKGVYDGVDELNDKNQFKLTSSAN 55
DB 386 NKYQOQSYLN--IERLRTEDEQLGDELNNLIK-----GLEKVEDSIGNESYEKIEILNN 438

QY 56 SKIRVTQNMNIIFNSVFLDSFVIRIPRYKND-----GQNTYHNEYTIINCMK 106
DB 439 AITNINNEINVIKEN-----EKAKDELKLLGSKQELNQEINEKTI---LK 482

QY 107 NNSGKWSIRGNRIIWLIDINGKTKSVFEFY-----NIREDISSEVINRWF 152
DB 483 N-----LEIKLDYDKSKLDLNDK--ESFISEIKSAVKIGDQCPICGNEIQDLGHID--- 533

QY 153 FVITITNNLNNAK--IYIN-GKLES-----NTDIKDIREVIANGEIIFKLDGDDRTQFIWM 205
DB 534 FDSIAKQNEIKEIEANIHTMESIAVHNSKIFVNEKISN--INIKTQSDLS----- 584

QY 206 KYFSIFNTEL--SQSNIEERYKIQSYSEVLKDFWGNPLM--YNKEYYMFNAGKN-SYIK 260
DB 585 --LEVLNKRLLLENALNNORLNKFIQMKKEKDLTLQIHNKQLRL---NKNSESELK 638

QY 261 LKQDSPVGEILTTSKYN-----QNSKYINVRDLYIGKFTIRR-- 298
DB 639 ICRNL--ITEFETLSKYNNTNFVDYKKYIQDVNQHQEHSNQIEDKLIQLSORKKLEQNN 697

QY 299 ----KNSQSINDIVRKEDYIYLDFFNLNQ-----EWR-----VYTYK 333
DB 698 LNHYENQLETYNNDLENEQSIEMESRLNLTDDNDINETIAWRGEQEELKRDYKRR 757

QY 334 YFKKEEKLFLAPIS-----DSELYNTIQIKE-----YDEQPT--YSCQLLKKDEE 379
DB 758 YHEFEMEIALESUTKKELLDSKLDKDDYELAKGKMTLIDSEYSAVHYOCONNIKTOS 817

QY 380 STDEIGLIGHRFVESGIVFEEYKD 404
DB 818 IVSHINVLN-----QELKD 831

RESULT 9
US-09-815-242-12141
; Sequence 12141, Application US/09815242
; Patent No. US20020061569A1
; GENERAL INFORMATION:
; APPLICANT: Haselbeck, Robert
; APPLICANT: Ohlsen, Rari L.
; APPLICANT: Zyskind, Judith W.
; APPLICANT: Wall, Daniel
; APPLICANT: Trawick, John D.

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; APPLICANT: Carr, Grant J.
; APPLICANT: Yamamoto, Robert T.
; APPLICANT: Xu, H. Howard
; TITLE OF INVENTION: Identification of Essential Genes in
; TITLE OF INVENTION: Prokaryotes
; FILE REFERENCE: ELITRA.011A
; CURRENT APPLICATION NUMBER: US/09/815,242
; CURRENT FILING DATE: 2001-03-21
; PRIOR APPLICATION NUMBER: 60/191,078
; PRIOR FILING DATE: 2000-03-21
; PRIOR APPLICATION NUMBER: 60/206,848
; PRIOR FILING DATE: 2000-05-23
; PRIOR APPLICATION NUMBER: 60/207,727
; PRIOR FILING DATE: 2000-05-26
; PRIOR APPLICATION NUMBER: 60/242,578
; PRIOR FILING DATE: 2000-10-23
; PRIOR APPLICATION NUMBER: 60/253,625
; PRIOR FILING DATE: 2000-11-27
; PRIOR APPLICATION NUMBER: 60/257,931
; PRIOR FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/269,308
; PRIOR FILING DATE: 2001-02-16
; NUMBER OF SEQ ID NOS: 14110
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12141
; LENGTH: 1009
; TYPE: PRT
; ORGANISM: Staphylococcus aureus
US-09-815-242-12141

Query Match          6.1%; Score 144; DB 10; Length 1009;
Best Local Similarity 21.0%; Pred. No. 0.00071;
Matches 106; Conservative 82; Mismatches 155; Indels 162; Gaps 28;

QY 3 NKYNSEILNNIILNRYKD-----NNLIDLSGKGVKGVYDGVDELNDKNQFKLTSSAN 55
DB 386 NKYQOQSYLN--IERLRTEDEQLGDELNNLIK-----GLEKVEDSIGNESYEKIEILNN 438

QY 56 SKIRVTQNMNIIFNSVFLDSFVIRIPRYKND-----GQNTYHNEYTIINCMK 106
DB 439 AITNINNEINVIKEN-----EKAKDELKLLGSKQELNQEINEKTI---LK 482

QY 107 NNSGKWSIRGNRIIWLIDINGKTKSVFEFY-----NIREDISSEVINRWF 152
DB 483 N-----LEIKLDYDKSKLDLNDK--ESFISEIKSAVKIGDQCPICGNEIQDLGHID--- 533

QY 153 FVITITNNLNNAK--IYIN-GKLES-----NTDIKDIREVIANGEIIFKLDGDDRTQFIWM 205
DB 534 FDSIAKQNEIKEIEANIHTMESIAVHNSKIFVNEKISN--INIKTQSDLS----- 584

QY 206 KYFSIFNTEL--SQSNIEERYKIQSYSEVLKDFWGNPLM--YNKEYYMFNAGKN-SYIK 260
DB 585 --LEVLNKRLLLENALNNORLNKFIQMKKEKDLTLQIHNKQLRL---NKNSESELK 638

QY 261 LKQDSPVGEILTTSKYN-----QNSKYINVRDLYIGKFTIRR-- 298
DB 639 ICRNL--ITEFETLSKYNNTNFVDYKKYIQDVNQHQEHSNQIEDKLIQLSORKKLEQNN 697

QY 299 ----KNSQSINDIVRKEDYIYLDFFNLNQ-----EWR-----VYTYK 333
DB 698 LNHYENQLETYNNDLENEQSIEMESRLNLTDDNDINETIAWRGEQEELKRDYKRR 757

QY 334 YFKKEEKLFLAPIS-----DSELYNTIQIKE-----YDEQPT--YSCQLLKKDEE 379
DB 758 YHEFEMEIALESUTKKELLDSKLDKDDYELAKGKMTLIDSEYSAVHYOCONNIKTOS 817

QY 380 STDEIGLIGHRFVESGIVFEEYKD 404
DB 818 IVSHINVLN-----QELKD 831

RESULT 10
US-09-774-414-3

```



Sequence 3, Application US/09774414  
Patent No. US2002010231A1  
GENERAL INFORMATION:  
APPLICANT: The Institute of Physical and Chemical Research  
TITLE OF INVENTION: Endonuclease  
FILE REFERENCE: PH-651  
CURRENT APPLICATION NUMBER: US/09/774,414  
PRIOR FILING DATE: 2001-01-31  
PRIOR APPLICATION NUMBER: 09/306,970  
PRIOR FILING DATE: 1999-05-07  
NUMBER OF SEQ ID NOS: 38  
SOFTWARE: PatentIn Ver. 2.0  
SEQ ID NO 3  
LENGTH: 476  
TYPE: PRT  
ORGANISM: Saccharomyces cerevisiae  
US-09-774-414-3

Query Match 5.9%; Score 137.5; DB 10; Length 476;  
Best Local Similarity 18.4%; Pred. No. 0.00095;  
Matches 88; Conservative 75; Mismatches 123; Indels 193; Gaps 23;

4 KYNSEILNIIILRYKDNKDLISGAKVEYDGVDELNDKNOFKLTSSANSKIRVTQN 63  
124 KYN-ELLKNIMNLYKTSN-----IETNLSNNEFYL----- 153  
64 QNIIFSVFLDSVSWIRIPKPKNDGIONYIHNEY-----TIINCMMKNSGW-KISIRGN 118  
154 -----MDKYLINIKMYKLDMLNMPNMYMNFNINIKAGK 186  
119 RIITWLDINGTKSVFFSEYINREIDISEYNRWF-----VTITNNLNA--KIYINGKL 171  
187 LNIKTVDLNL--NNEFYD-----LSGLIEGDGIVGGITTHANDVLTIFINKRI 238  
172 ESTNDKIDREVIANGELIKLGDIDRTQFTWIKYFSEFNTELQSILBRYKIQSISE 231  
239 KNSILVEKMDTLK-----DNPFYV-----NAFSINIKTNLAKKEIFTNIIYK 281  
232 YLKDFWGNPLMYNKYEMFAGNKNKSYIKLKDSPVGEIL-----TR 273  
282 LYSYKIQINNIHPY-----NYLAKNKLPKIMDKNNYVLAGTAAAGSPLS 333  
274 SKYNQSKYI--NYRDLIGEKEFIIRKNSOSINDDIYRKE-DIYLDFFNLN----- 324  
334 SMVNPDKTLFLKMRPSYV-----ISQVETKELIYLIQESFELSISNYKK 379  
325 -QENRVVYKYFKKEBEKLF-----LAPISDSDEL-----YNTIQIKYDEQPTYS 369  
380 VGNKLDKFLFTTIDELMKFYIYDFKFLPLHDNKQPNYIKFRENFTF-IKSYNNW--- 434  
370 QQLLFKDEBSTDIGLIGHIRFYESGIVFEY-----KDYFCISKWYLYKVRKP 420  
435 -----NRVF--GLVLSEYINNIDYDYYNKKYIINHNHARKP 471

RESULT 11  
US-09-815-242-13683  
Sequence 13683, Application US/09815242  
Patent No. US20020061569A1  
GENERAL INFORMATION:  
APPLICANT: Haselbeck, Robert  
APPLICANT: Ohlsen, Kari L.  
APPLICANT: Zyskind, Judith W.  
APPLICANT: Wall, Daniel  
APPLICANT: Trawick, John D.  
APPLICANT: Carr, Grant J.  
APPLICANT: Yamamoto, Robert T.  
APPLICANT: Xu, H. Howard  
TITLE OF INVENTION: Identification of Essential Genes in  
TITLE OF INVENTION: Prokaryotes  
FILE REFERENCE: ELITRA-011A  
CURRENT APPLICATION NUMBER: US/09/815,242  
CURRENT FILING DATE: 2001-03-21

PRIOR APPLICATION NUMBER: 60/191,078  
PRIOR FILING DATE: 2000-03-21  
PRIOR APPLICATION NUMBER: 60/206,848  
PRIOR FILING DATE: 2000-05-23  
PRIOR APPLICATION NUMBER: 60/207,727  
PRIOR FILING DATE: 2000-05-26  
PRIOR APPLICATION NUMBER: 60/242,578  
PRIOR FILING DATE: 2000-10-23  
PRIOR APPLICATION NUMBER: 60/253,625  
PRIOR FILING DATE: 2000-11-27  
PRIOR APPLICATION NUMBER: 60/257,931  
PRIOR FILING DATE: 2000-12-22  
PRIOR APPLICATION NUMBER: 60/269,308  
PRIOR FILING DATE: 2001-02-16  
NUMBER OF SEQ ID NOS: 14110  
SOFTWARE: FastSeq for Windows Version 4.0  
SEQ ID NO 13683  
LENGTH: 609  
TYPE: PRT  
ORGANISM: Streptococcus pneumoniae  
US-09-815-242-13683

Query Match 5.1%; Score 121; DB 10; Length 609;  
Best Local Similarity 18.5%; Pred. No. 0.025;  
Matches 72; Conservative 61; Mismatches 136; Indels 120; Gaps 15;

74 DESVSFWIRIPKPK-----NDGIONYIHNEYTIINCMMKNSGWKISIRGNRII 121  
36 DFGMRNYLDFPSYKELVKMYNDNLSNDGLYEFREDRO----- 73  
122 WTLLIDINGTKSVFFSEYINREIDIS-----EYNRWFVITNNLNAKIYINGKLESN 174  
74 ----EYNQR--YSHHIIQSFPDHLTPQINRIIGYEV-----KELTGRFRFI 119  
175 TDIKDIREVIANGELIKLGDIDRTQFTWIKYFSEFNTELSQSN-----IEERYK 225  
120 VATHVDKGHHHIILNSIDQNSDK-KFLW-NYKSERNLRMVSDRLSKIAGAKIENRYS 177  
226 IQSYSEYLDKDFWGNPLMYNKYEMFAGNKNKSYIKLKK-----DSPV 267  
178 HRQYEVYRTNYKYEIKQRYVFLIENSKNFEDFRKKAKALHLIDFRKKHVVFTMTDSNM 237  
268 GEILTRSKYNQSKYINRYDLVIGKEFIIRKSN-----SQSIND-----DI 309  
238 KQVRDCKLNRRQP---YNETYKQKQVOREIINLEFLPKMKNNNELIQQAFFDLKI 294  
310 VRKEDYIYLD-----FNLQENRVVYKYFKKEBEKFLAPISDSDELYNTIQI 359  
295 IPKEKVLFEFNGIKLSEQELGKMNQYSYFQDYFNKNNE-TFVLDDNNLIELYNKEKL 353  
360 KEYDEOPT-----YSCOLLFFKDBESTDEI 384  
354 IKKELPTEVWVWKSQDFARNDAVHEL 382

RESULT 12  
US-09-924-154-13  
Sequence 13, Application US/09924154  
Patent No. US20020127241A1  
GENERAL INFORMATION:  
APPLICANT: Narum, David L.  
APPLICANT: Sim, Kim L.  
TITLE OF INVENTION: Anti-plasmodium Compositions and Methods of Use  
FILE REFERENCE: 05213-0465 43170-262105  
CURRENT APPLICATION NUMBER: US/09/924,154  
CURRENT FILING DATE: 2001-08-07  
PRIOR APPLICATION NUMBER: US 60/223,525  
PRIOR FILING DATE: 2000-08-07  
NUMBER OF SEQ ID NOS: 17  
SOFTWARE: PatentIn version 3.1  
SEQ ID NO 13  
LENGTH: 1421  
TYPE: PRT

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; ORGANISM: Mammalian
US-09-924-154-13

Query Match
Best Local Similarity 5.1%; Score 121; DB 10; Length 1421;
Matches 110; Conservative 82; Mismatches 159; Indels 216; Gaps 32;

QY 3 NKYNSEILNIIILNRYKD-----NNLIDLSGYGAKV-----EYDGV--ELNDK---- 45
DB 225 NKVNSFCND--LKNFSLDYHLANGNDMDGGYSTKAKENIQVFGAHEISEHKIKN 282
QY 46 -----NQF--KLTSANSKIRVTQONQNIIFNSVDFSVFWI-----R 82
DB 283 FRKKWNEFEKLEWAMELSEHR--NNINCKNIPQELQITQWIKWEGHEFLLRDRNRK 340
QY 83 IP--KYKNDGIQNIYHNEVTIINCNNKNSGKISIRGNRIIWLIDINGKTSVFFEVNI 140
DB 341 LPKSKCKNTLVEACEKE--CIDPCMKYRD--WIIR---SKFEHILSKYEYQKV-----P 390
QY 141 REDISYINRWFFVTITNNLNNAKIYINGKLESNTDIK-----DIREVIANGEI 189
DB 391 KENAEVYL-----IKISEKNDAKYSL---LLNCGDAEYSKYCDCKHTTILVKSVLNGN- 441
QY 190 IFKLDGDI--DRQFIIMKYFSIFNTELSQSNIEERYKI---QSYSEYKLD----- 235
DB 442 ----DNTIKEREHLDLDFSKPGCD--KNSVDITNKVWECKPKYKSTKDVCPVPRROE 495
QY 236 -----FWGNPLMYNKEYMFNAGNKNYSIKL-----KQSPVGEIILTRS----- 274
DB 496 LCLGNIDRIYKMLIKHEILAIAIESRIKRYKKNKDDKEVCKIINKTFADIRDIIG 555
QY 275 -----KYNQNSKIYINRDLYIOTEKFTIIRKNSQSINDD---IVRKE--- 313
DB 556 GTDYWDLNLRKLVGKINTNSYVH-----RNKQNDKLFDRDEWKKVKKDVMN 603
QY 314 --DIYILD-----FFNLNQSW-----RVYTYKYKKEE----- 340
DB 604 VISWFKDVTCKEDDIENIPQFWRFSWGDYCODKTKMIETLKVECKEPCEDDCK 663
QY 341 ---KLFAPISDSDELYNIQIKEYDEQPTYSCQLLFFKDESDIEIGLIGHFYESGI 397
DB 664 RKNSYKWKISKKKEEYK--QAKQOE-----YQGN 694
QY 398 VFEEYKDYFCIS--KWYLKEVKRRPYNL 423
DB 695 NYKMYSEFKIKPEVILKYSEKCSNL 721

RESULT 13
US-09-765-205-8
; Sequence 8, Application US/09765205
; Patent No. US20020034800A1
; GENERAL INFORMATION:
; APPLICANT: Cao, Li
; TITLE OF INVENTION: BONE MARROW SECRETED PROTEINS AND POLYNUCLEOTIDES
; FILE REFERENCE: 1458.004/200130.449
; CURRENT APPLICATION NUMBER: US/09/765,205
; CURRENT FILING DATE: 2001-01-17
; PRIOR APPLICATION NUMBER: US/09/212,440
; PRIOR FILING DATE: 1998-12-16
; NUMBER OF SEQ ID NOS: 46
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 8
; LENGTH: 406
; TYPE: PRT
; ORGANISM: human
US-09-765-205-8

Query Match
Best Local Similarity 4.8%; Score 112.5; DB 10; Length 406;
Matches 61; Conservative 43; Mismatches 86; Indels 91; Gaps 15;

QY 151 WFFVTITNNLNNAKIYINGKLESNTDIKDIREVIANGEI-----IFK 192

; ORGANISM: Mammalian
US-09-924-154-13

Query Match
Best Local Similarity 19.4%; Pred. No. 0.069;
Matches 110; Conservative 82; Mismatches 159; Indels 216; Gaps 32;

QY 3 NKYNSEILNIIILNRYKD-----NNLIDLSGYGAKV-----EYDGV--ELNDK---- 45
DB 225 NKVNSFCND--LKNFSLDYHLANGNDMDGGYSTKAKENIQVFGAHEISEHKIKN 282
QY 46 -----NQF--KLTSANSKIRVTQONQNIIFNSVDFSVFWI-----R 82
DB 283 FRKKWNEFEKLEWAMELSEHR--NNINCKNIPQELQITQWIKWEGHEFLLRDRNRK 340
QY 83 IP--KYKNDGIQNIYHNEVTIINCNNKNSGKISIRGNRIIWLIDINGKTSVFFEVNI 140
DB 341 LPKSKCKNTLVEACEKE--CIDPCMKYRD--WIIR---SKFEHILSKYEYQKV-----P 390
QY 141 REDISYINRWFFVTITNNLNNAKIYINGKLESNTDIK-----DIREVIANGEI 189
DB 391 KENAEVYL-----IKISEKNDAKYSL---LLNCGDAEYSKYCDCKHTTILVKSVLNGN- 441
QY 190 IFKLDGDI--DRQFIIMKYFSIFNTELSQSNIEERYKI---QSYSEYKLD----- 235
DB 442 ----DNTIKEREHLDLDFSKPGCD--KNSVDITNKVWECKPKYKSTKDVCPVPRROE 495
QY 236 -----FWGNPLMYNKEYMFNAGNKNYSIKL-----KQSPVGEIILTRS----- 274
DB 496 LCLGNIDRIYKMLIKHEILAIAIESRIKRYKKNKDDKEVCKIINKTFADIRDIIG 555
QY 275 -----KYNQNSKIYINRDLYIOTEKFTIIRKNSQSINDD---IVRKE--- 313
DB 556 GTDYWDLNLRKLVGKINTNSYVH-----RNKQNDKLFDRDEWKKVKKDVMN 603
QY 314 --DIYILD-----FFNLNQSW-----RVYTYKYKKEE----- 340
DB 604 VISWFKDVTCKEDDIENIPQFWRFSWGDYCODKTKMIETLKVECKEPCEDDCK 663
QY 341 ---KLFAPISDSDELYNIQIKEYDEQPTYSCQLLFFKDESDIEIGLIGHFYESGI 397
DB 664 RKNSYKWKISKKKEEYK--QAKQOE-----YQGN 694
QY 398 VFEEYKDYFCIS--KWYLKEVKRRPYNL 423
DB 695 NYKMYSEFKIKPEVILKYSEKCSNL 721

RESULT 14
US-09-801-368-392
; Sequence 392, Application US/09801368
; Patent No. US20020128250A1
; GENERAL INFORMATION:
; APPLICANT: Busby, Robert
; APPLICANT: Call, Brian
; APPLICANT: Hecht, Peter
; APPLICANT: Holtzman, Doug
; APPLICANT: Madden, Kevin
; APPLICANT: Maxon, Mary
; APPLICANT: Milne, Todd
; APPLICANT: No. US20020128250Alman, Thea
; APPLICANT: Royer, John
; APPLICANT: Salama, Sofie
; APPLICANT: Sherman, Amir
; APPLICANT: Silva, Jeff
; APPLICANT: Summers, Eric
; TITLE OF INVENTION: Methods for Improving Secondary Metabolite Production in Fungi
; FILE REFERENCE: 109272.147
; CURRENT APPLICATION NUMBER: US/09/801,368
; CURRENT FILING DATE: 2001-03-07
; PRIOR APPLICATION NUMBER: US 09/487,558
; PRIOR FILING DATE: 2000-01-19
; PRIOR APPLICATION NUMBER: US 60/160,597
; PRIOR FILING DATE: 1999-10-20
; NUMBER OF SEQ ID NOS: 440
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 392
; LENGTH: 1093
; TYPE: PRT
; ORGANISM: Saccharomyces cerevisiae
US-09-801-368-392

Query Match
Best Local Similarity 4.7%; Score 110.5; DB 10; Length 1093;
Matches 79; Conservative 52; Mismatches 136; Indels 91; Gaps 18;

QY 1 MANKYSEILN---NIILNRYKDN-----LIDLSGYGAKVEYDGVVELNDKNOF 48
DB 121 LVNKY--EIIDPVVNSILTFQDPNPPKRSKNSILRKTSPGKIT--SPSSYKNTPRK 176
QY 49 KLTSANSKIRVTQN-----QNIIFNSVDFSVFWIRPKYKNDGI 91
DB 177 KNSSSTSATTTAANKKGNKKNASINQPNPSPQLNLFVQPP--QOFVNSNMNNNDHT 235
QY 92 QNTYHNE--YTIINCNNKNSGKISIRGNRIIWLIDINGKTSVFFEYINREDISEYIN 149
DB 236 TMFNENDTRNLNINNSNSQSTIIQ-----QCKSI--HENSEFNNTSATQK 281
QY 150 RWFVTITNNLNNAKIYIN--GKLESNTDIKDIREVI-----ANGEIIFKLDGDI 198
DB 282 PLOFFPPTNLQNKVALNPNNDNSYSHNIDVINSSNNNNNNNNLLIIVPDGPMQ 341
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Qy 199 RTQ-----FIWKVESIPN-----TELSSNIEERY-----KIQSYSEVLKD 235  
Db 342 SOQQOQHHEYITNNFNSMDSITNGSKRRKRLNOSQOQFYNOOEKIQHFILMKQ 401  
Qy 236 --FW---GNPLMYNEFYMFNAGNSYIKLKKDPSVGEIITRSKYNQNSKIYINRDL 288  
Db 402 PLIQSQFQPNPDHNEYCDNSGNNNTVASNGSSI-EVFS-SNENDSNMMSRSM 457

RESULT 15  
US-09-881-752A-280  
; Sequence 280, Application US/09881752A  
; Patent No. US20020115078A1  
; GENERAL INFORMATION:  
; APPLICANT: Kleanthous, Harold  
; APPLICANT: Al-Garawi, Amal  
; APPLICANT: Millier, Charles  
; APPLICANT: Tomb, Jean-Francois  
; APPLICANT: Oomet, Raymond P.  
; TITLE OF INVENTION: Identification of Polynucleotides  
; TITLE OF INVENTION: Encoding No. US20020115078A1el Helicobacter Polypeptides in the  
; TITLE OF INVENTION: Genome  
; FILE REFERENCE: 06132/041002  
; CURRENT APPLICATION NUMBER: US/09/881,752A  
; CURRENT FILING DATE: 2001-06-15  
; PRIOR APPLICATION NUMBER: US 08/833,457  
; PRIOR FILING DATE: 1997-04-01  
; NUMBER OF SEQ ID NOS: 370  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 280  
; LENGTH: 751  
; TYPE: PRT  
; ORGANISM: Helicobacter pylori  
US-09-881-752A-280

Query Match 4.7% Score 110; DB 10; Length 751;  
Best Local Similarity 15.8% Pred. No. 0.24;  
Matches 94; Conservative 76; Mismatches 162; Indels 226; Gaps 25;  
Qy 20 KDNLDLGGYKAKVEYDGVDELNDKNQKLTSSANSKIRVTQONII----- 67  
Db 229 RDKNLVLP-----RVEYHNTIKR-KEDIK-----DNKYRAYDEKRNALLDTRRIKEITKC 276  
Qy 68 -----FNSVELDFSV-----SFWRIPKVKND-----GIQYIHN-EYTIINCM 105  
Db 277 ILRFNQATKKNFNSILACSSIEALKKYQAFKEKHDLKAAIFSYSAHEEDTLEDE 336  
Qy 106 KNSGKISIRNR--IIWTLIDINGKTSVFPEYNIREDISEYINRWFFVTITNNLNA 163  
Db 337 NNEACRLD-KSSRDFLEGAIADYNGM-----FCVSPDTSQKRFQSYKDLQSKMKER 388  
Qy 164 KIYINGKLENTDIKIDREYIANGELIIFKLDGIDTQFIW---MKYFSEFNTLSOSN 219  
Db 389 KI-----DLIMVYN---MFITGDAIKLNTLWVDKMLKYLHGLIQAFSRAHR 431  
Qy 220 IEERYK-----IQSYSEYKDFWGNPLMYNKEY 247  
Db 432 ILDSVKTHGNIVCFRDLLEQDLNDALMFGNKDAQSTALLRKYEDYLGKGTDN---NKEY 487  
Qy 248 Y-----MFNAGNKNYSIKL-----KDSVPVGEILT 272  
Db 488 EGYEGLIKRLITFEPKPEIVSESKQKDFIKLFGKTLKLENILNSFENFKDDYIN---P 544  
Qy 273 RSKYNQNSKYINVRDLYIGKFIIRKSNSSQSDIV----- 310  
Db 545 RFDQYQSKYLDYFDMRSEK-----GKDEEINDLIFEIELIKQVEVNIYILNLIEE 599  
Qy 311 -----RKEDIYI--YLDFFNLNQEWRVYTYKFKKEEK 341  
Db 600 FAKHGVEIQGVKTKIEPIINSIELRNKDLIMDFDKYNDQEVHAHFQDYIHOKRE- 658  
Qy 342 LFLAPISDSDELYNTIQIKVEYDQPTYSQCLLFKKDEESTDEIGLIGIRHYFESGIVPEE 401

Db 659 -----EEFQNIIEENRLNEEKAYS-----PMOHAFKGEISFSCT-----EFPKIIEE 701  
Qy 402 KADYFCISKWILKEVWRK 419  
Db 702 KPSMFGKNSRY-OEYKEK 718  
Search completed: November 1, 2002, 08:24:23  
Job time : 34 secs

GenCore version 5.1.3  
Copyright (c) 1993 - 2002 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: November 1, 2002, 07:20:38 ; Search time 291 Seconds  
(without alignments)  
974.854 Million cell updates/sec

Title: US-09-910-186A-8  
Perfect score: 2350  
Sequence: 1 MANKYNSLNNILNLYK.....YNLKLGNWQIFPKDEGWT 440

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5  
Total number of hits satisfying chosen parameters: 4569144

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000  
Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

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27: /cgn2\_6/ptodata/1/paa/US60\_COMB.pap.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	2350	100.0	440	20	US-09-611-419A-8
2	2350	100.0	440	23	US-09-910-186A-8
3	2340	99.6	472	1	PCT-US97-15394-46
4	2340	99.6	472	11	US-08-704-159-46
5	2340	99.6	472	26	US-10-271-012-46
6	2340	99.6	850	5	US-08-123-975A-2

7	2340	99.6	1070	22	US-09-831-050-4	Sequence 4, Appl
8	2340	99.6	1095	22	US-09-831-050-7	Sequence 7, Appl
9	2340	99.6	1291	1	PCT-US97-15394-42	Sequence 42, Appl
10	2340	99.6	1291	11	US-08-704-159-42	Sequence 42, Appl
11	2340	99.6	1291	26	US-10-271-012-42	Sequence 42, Appl
12	2337	99.4	439	5	US-08-123-975A-5	Sequence 5, Appl
13	2283.5	97.2	436	20	US-09-611-419A-40	Sequence 40, Appl
14	2227.5	94.8	843	20	US-09-611-419A-42	Sequence 42, Appl
15	2102	89.4	472	1	PCT-US97-15394-44	Sequence 44, Appl
16	2102	89.4	472	11	US-08-704-159-44	Sequence 44, Appl
17	2102	89.4	472	26	US-10-271-012-44	Sequence 44, Appl
18	2099	89.3	1291	1	PCT-US97-15394-40	Sequence 40, Appl
19	2099	89.3	1291	11	US-08-704-159-40	Sequence 40, Appl
20	2099	89.3	1291	19	US-09-547-188-4	Sequence 47, A
21	2099	89.3	1291	21	US-09-791-537-35147	Sequence 35147, A
22	2099	89.3	1291	26	US-10-205-516-4	Sequence 4, Appl
23	2099	89.3	1291	26	US-10-271-012-40	Sequence 40, Appl
24	2099	89.3	1301	26	US-10-205-516-18	Sequence 18, Appl
25	2097	89.2	441	21	US-09-791-537-49461	Sequence 49461, A
26	1667	70.9	1169	26	US-10-241-596-20	Sequence 20, Appl
27	1168.5	49.7	449	20	US-09-611-419A-18	Sequence 18, Appl
28	1168.5	49.7	449	23	US-09-910-186A-18	Sequence 18, Appl
29	1168.5	49.7	473	1	PCT-US97-15394-79	Sequence 79, Appl
30	1168.5	49.7	473	11	US-08-704-159-79	Sequence 79, Appl
31	1168.5	49.7	473	26	US-10-271-012-79	Sequence 77, Appl
32	1168.5	49.7	1297	1	PCT-US97-15394-77	Sequence 77, Appl
33	1168.5	49.7	1297	11	US-08-704-159-77	Sequence 77, Appl
34	1168.5	49.7	1297	19	US-09-547-188-14	Sequence 14, Appl
35	1168.5	49.7	1297	21	US-09-791-537-14255	Sequence 14255, A
36	1168.5	49.7	1297	21	US-09-791-537-152350	Sequence 152350, A
37	1168.5	49.7	1297	26	US-10-205-516-14	Sequence 14, Appl
38	1168.5	49.7	1297	26	US-10-271-012-77	Sequence 77, Appl
39	1168.5	49.7	1307	26	US-10-205-516-28	Sequence 28, Appl
40	831.5	35.4	434	20	US-09-611-419A-4	Sequence 4, Appl
41	831.5	35.4	434	23	US-09-910-186A-4	Sequence 4, Appl
42	831.5	35.4	435	20	US-09-611-419A-6	Sequence 6, Appl
43	831.5	35.4	435	23	US-09-910-186A-6	Sequence 6, Appl
44	831.5	35.4	437	20	US-09-611-419A-2	Sequence 2, Appl
45	831.5	35.4	437	23	US-09-910-186A-2	Sequence 2, Appl

ALIGNMENTS

RESULT 1  
US-09-611-419A-8  
Sequence 8, Application US/09611419A  
GENERAL INFORMATION:  
APPLICANT: Smith, Leonard A.  
APPLICANT: Byrne, Michael P.  
APPLICANT: Middlebrook, John L.  
APPLICANT: Lapenotiere, Hugh  
APPLICANT: Clayton, Michael A.  
APPLICANT: Brown, Douglas R.  
TITLE OF INVENTION: RECOMBINANT VACCINE AGAINST BOTULINUM  
TITLE OF INVENTION: NEUROTOXIN  
FILE REFERENCE: A33626 067252.0105  
CURRENT APPLICATION NUMBER: US/09/611,419A  
CURRENT FILING DATE: 2000-07-06  
PRIOR APPLICATION NUMBER: PCT/US00/12890  
PRIOR FILING DATE: 2000-05-12  
PRIOR APPLICATION NUMBER: 60/133,865  
PRIOR FILING DATE: 1999-05-12  
PRIOR APPLICATION NUMBER: 60/133,866  
PRIOR FILING DATE: 1999-05-12  
PRIOR APPLICATION NUMBER: 60/133,867  
PRIOR FILING DATE: 1999-05-12  
PRIOR APPLICATION NUMBER: 60/133,868  
PRIOR FILING DATE: 1999-05-12  
PRIOR APPLICATION NUMBER: 60/133,869  
PRIOR FILING DATE: 1999-05-12  
PRIOR APPLICATION NUMBER: 60/146,192  
PRIOR FILING DATE: 1999-07-29

; NUMBER OF SEQ ID NOS: 42  
 ; SOFTWARE: FastSeq for Windows Version 4.0  
 ; SEQ ID NO 8  
 ; LENGTH: 440  
 ; TYPE: PRT  
 ; ORGANISM: Artificial Sequence  
 ; FEATURE:  
 ; OTHER INFORMATION: Encoded polypeptide of a synthetic construct based  
 ; OTHER INFORMATION: on BoNTB Hc  
 US-09-611-419A-8

Query Match 100.0%; Score 2350; DB 20; Length 440;  
 Best Local Similarity 100.0%; Pred. No. 3e-206;  
 Matches 440; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY	1	MANKYSEILNLIILNRYKNNLIDLSYGAKVEYDGVDELNDKNQFKLTSSANSKIRV	60
DB	1	MANKYSEILNLIILNRYKNNLIDLSYGAKVEYDGVDELNDKNQFKLTSSANSKIRV	60
QY	61	TQNCIIFNSVFLDFSVFWIRPKYKNDGIONYIHNEYTIINCKMNSGKWSIRGNRI	120
DB	61	TQNCIIFNSVFLDFSVFWIRPKYKNDGIONYIHNEYTIINCKMNSGKWSIRGNRI	120
QY	121	IWFLIDNGTKSVFEYINREDISEYINRWFFVITNNLNNAKIYINGKLESNTDIKI	180
DB	121	IWFLIDNGTKSVFEYINREDISEYINRWFFVITNNLNNAKIYINGKLESNTDIKI	180
QY	181	REVANGEEIFKLDGIDRTQFIWMKYFSIFNTELSQSNIEERYKIQSYSEYKDFWGNP	240
DB	181	REVANGEEIFKLDGIDRTQFIWMKYFSIFNTELSQSNIEERYKIQSYSEYKDFWGNP	240
QY	241	LMYKYYMFNAGKNSYIKLKDPSVGEILTRSKYNQNSKYINRDYIIGKFIIRKS	300
DB	241	LMYKYYMFNAGKNSYIKLKDPSVGEILTRSKYNQNSKYINRDYIIGKFIIRKS	300
QY	301	NSQINDIVRKEDIYLDFFNLQEWRYTYKYFKKEEKLFLAPISDSDELYNTIOIK	360
DB	301	NSQINDIVRKEDIYLDFFNLQEWRYTYKYFKKEEKLFLAPISDSDELYNTIOIK	360
QY	361	EYDEQPTYSQCLLFKDEESTDEIGLIGHRFEYSIGVFEYKDYFCISKWYLKVKRKP	420
DB	361	EYDEQPTYSQCLLFKDEESTDEIGLIGHRFEYSIGVFEYKDYFCISKWYLKVKRKP	420
QY	421	YNLKGNCWQFIPKDEGWTGTE 440	
DB	421	YNLKGNCWQFIPKDEGWTGTE 440	

RESULT 2

US-09-910-186a-8  
 ; Sequence 8, Application US/09910186A  
 ; GENERAL INFORMATION:  
 ; APPLICANT: U.S. Army Medical Research & Material Command  
 ; TITLE OF INVENTION: RECOMBINANT VACCINE AGAINST BOTULINUM  
 ; TITLE OF INVENTION: NEUROTOXIN  
 ; FILE REFERENCE: A33626-A 067452.0107  
 ; CURRENT APPLICATION NUMBER: US/09/910,186A  
 ; CURRENT FILING DATE: 2001-07-20  
 ; PRIOR APPLICATION NUMBER: PCT/US00/12890  
 ; PRIOR FILING DATE: 2000-05-12  
 ; PRIOR APPLICATION NUMBER: 09/611,419  
 ; PRIOR FILING DATE: 2000-07-06  
 ; PRIOR APPLICATION NUMBER: 60/133,865  
 ; PRIOR FILING DATE: 1999-05-12  
 ; PRIOR APPLICATION NUMBER: 60/133,866  
 ; PRIOR FILING DATE: 1999-05-12  
 ; PRIOR APPLICATION NUMBER: 60/133,867  
 ; PRIOR FILING DATE: 1999-05-12  
 ; PRIOR APPLICATION NUMBER: 60/133,868  
 ; PRIOR FILING DATE: 1999-05-12  
 ; PRIOR APPLICATION NUMBER: 60/133,869  
 ; PRIOR FILING DATE: 1999-05-12  
 ; PRIOR APPLICATION NUMBER: 60/133,873

; PRIOR FILING DATE: 1999-05-12  
 ; PRIOR APPLICATION NUMBER: 08/123,975  
 ; PRIOR FILING DATE: 1993-09-21  
 ; NUMBER OF SEQ ID NOS: 34  
 ; SOFTWARE: FastSeq for Windows Version 4.0  
 ; SEQ ID NO 8  
 ; LENGTH: 440  
 ; TYPE: PRT  
 ; ORGANISM: Artificial Sequence  
 ; FEATURE:  
 ; OTHER INFORMATION: Synthetic construct based on Clostridium botulinum  
 ; OTHER INFORMATION: sequence  
 US-09-910-186A-8

Query Match 100.0%; Score 2350; DB 23; Length 440;  
 Best Local Similarity 100.0%; Pred. No. 3e-206;  
 Matches 440; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY	1	MANKYSEILNLIILNRYKNNLIDLSYGAKVEYDGVDELNDKNQFKLTSSANSKIRV	60
DB	1	MANKYSEILNLIILNRYKNNLIDLSYGAKVEYDGVDELNDKNQFKLTSSANSKIRV	60
QY	61	TQNCIIFNSVFLDFSVFWIRPKYKNDGIONYIHNEYTIINCKMNSGKWSIRGNRI	120
DB	61	TQNCIIFNSVFLDFSVFWIRPKYKNDGIONYIHNEYTIINCKMNSGKWSIRGNRI	120
QY	121	IWFLIDNGTKSVFEYINREDISEYINRWFFVITNNLNNAKIYINGKLESNTDIKI	180
DB	121	IWFLIDNGTKSVFEYINREDISEYINRWFFVITNNLNNAKIYINGKLESNTDIKI	180
QY	181	REVANGEEIFKLDGIDRTQFIWMKYFSIFNTELSQSNIEERYKIQSYSEYKDFWGNP	240
DB	181	REVANGEEIFKLDGIDRTQFIWMKYFSIFNTELSQSNIEERYKIQSYSEYKDFWGNP	240
QY	241	LMYKYYMFNAGKNSYIKLKDPSVGEILTRSKYNQNSKYINRDYIIGKFIIRKS	300
DB	241	LMYKYYMFNAGKNSYIKLKDPSVGEILTRSKYNQNSKYINRDYIIGKFIIRKS	300
QY	301	NSQINDIVRKEDIYLDFFNLQEWRYTYKYFKKEEKLFLAPISDSDELYNTIOIK	360
DB	301	NSQINDIVRKEDIYLDFFNLQEWRYTYKYFKKEEKLFLAPISDSDELYNTIOIK	360
QY	361	EYDEQPTYSQCLLFKDEESTDEIGLIGHRFEYSIGVFEYKDYFCISKWYLKVKRKP	420
DB	361	EYDEQPTYSQCLLFKDEESTDEIGLIGHRFEYSIGVFEYKDYFCISKWYLKVKRKP	420
QY	421	YNLKGNCWQFIPKDEGWTGTE 440	
DB	421	YNLKGNCWQFIPKDEGWTGTE 440	

RESULT 3

PCT-US97-15394-46  
 ; Sequence 46, Application PC/TUS9715394  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Williams, James A.  
 ; APPLICANT: Thalley, Bruce S.  
 ; TITLE OF INVENTION: Multivalent Vaccine For Clostridium  
 ; TITLE OF INVENTION: Botulinum Neurotoxin  
 ; NUMBER OF SEQUENCES: 82  
 ; CORRESPONDENCE ADDRESS:  
 ; ADDRESSEE: Medlen & Carroll  
 ; STREET: 220 Montgomery Street, Suite 2200  
 ; CITY: San Francisco  
 ; STATE: California  
 ; COUNTRY: United States of America  
 ; ZIP: 94104  
 ; COMPUTER READABLE FORM:  
 ; MEDIUM TYPE: Floppy disk  
 ; COMPUTER: IBM PC compatible  
 ; OPERATING SYSTEM: PC-DOS/MS-DOS  
 ; SOFTWARE: PatentIn Release #1.0, Version #1.30  
 ; CURRENT APPLICATION DATA:

APPLICATION NUMBER: PCT/US97/15394  
 FILING DATE:  
 CLASSIFICATION:  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Ingolia, Diane E.  
 REGISTRATION NUMBER: 40,027  
 REFERENCE/DOCKET NUMBER: OPHD-02304  
 TELEPHONE: (415) 705-8410  
 TELEFAX: (415) 397-8338  
 INFORMATION FOR SEQ ID NO: 46:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 472 amino acids  
 TYPE: amino acid  
 TOPOLOGY: linear  
 MOLECULE TYPE: protein  
 PRTUS97-15394-46

Query Match 99.6%; Score 2340; DB 1; Length 472;  
 Best Local Similarity 99.5%; Pred. No. 2.8e-205;  
 Matches 438; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 MANKYSEILLNLLRYKDNLDLGSYGAKVEYDGVVLDNDKQKFLTSSANSKIRV 50  
 DB 33 MFKNYSEILLNLLRYKDNLDLGSYGAKVEYDGVVLDNDKQKFLTSSANSKIRV 92  
 QY 61 TQONLIFNSVFLDFSVFIRPKYKNDGIONYIHNEYTIINCMMKNSGWKISIRGNRI 120  
 DB 93 TQONLIFNSVFLDFSVFIRPKYKNDGIONYIHNEYTIINCMMKNSGWKISIRGNRI 152  
 QY 121 IWTLDINGTKTSVFFEYNIREDISEYINRWFFVTITNLLNNAKIYINGKLESNTDIKI 180  
 DB 153 IWTLDINGTKTSVFFEYNIREDISEYINRWFFVTITNLLNNAKIYINGKLESNTDIKI 212  
 QY 181 REVANGEIIFKLDGDDRTQFIWMKYFSIFNTELSQSNIEERYKIQSYEYLKDFWGNP 240  
 DB 213 REVANGEIIFKLDGDDRTQFIWMKYFSIFNTELSQSNIEERYKIQSYEYLKDFWGNP 272  
 QY 241 LMWKEYYMFNAGNKNYSYIKLKDPSVGEILTRSKYNQNSKYINRYDLVIGKFIIRRS 300  
 DB 273 LMWKEYYMFNAGNKNYSYIKLKDPSVGEILTRSKYNQNSKYINRYDLVIGKFIIRRS 332  
 QY 301 NSQSINDDIVRKEDIYLDFFNLQNEWRVYTYKFKKEEKLFLAPISDSDELYNTIQIK 360  
 DB 333 NSQSINDDIVRKEDIYLDFFNLQNEWRVYTYKFKKEEKLFLAPISDSDELYNTIQIK 392  
 QY 361 EYDEQPTYSCOLLFKKDEESTDEIGLIGIHRFYESGIVFEEYKDYFCISKWYLKEVKRKP 420  
 DB 393 EYDEQPTYSCOLLFKKDEESTDEIGLIGIHRFYESGIVFEEYKDYFCISKWYLKEVKRKP 452  
 QY 421 YNLKLGCNWQFIPKDEGWE 440  
 DB 453 YNLKLGCNWQFIPKDEGWE 472

RESULT 4  
 US-08-704-159-46  
 Sequence 46, Application US/08704159  
 GENERAL INFORMATION:  
 APPLICANT: Williams, James A.  
 APPLICANT: Thalley, Bruce S.  
 TITLE OF INVENTION: Multivalent Vaccine For Clostridium  
 TITLE OF INVENTION: Botulinum Neurotoxin  
 NUMBER OF SEQUENCES: 82  
 CORRESPONDENCE ADDRESS:  
 ADDRESS: Medlen & Carroll  
 STREET: 220 Montgomery Street, Suite 2200  
 CITY: San Francisco  
 STATE: California  
 COUNTRY: United States of America  
 ZIP: 94104  
 COMPUTER READABLE FORM:  
 MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: PatentIn Release #1.0, Version #1.30  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/08/704,159  
 FILING DATE:  
 CLASSIFICATION: 424  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Ingolia, Diane E.  
 REGISTRATION NUMBER: 40,027  
 REFERENCE/DOCKET NUMBER: OPHD-02304  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: (415) 705-8410  
 TELEFAX: (415) 397-8338  
 INFORMATION FOR SEQ ID NO: 46:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 472 amino acids  
 TYPE: amino acid  
 TOPOLOGY: linear  
 MOLECULE TYPE: protein  
 US-08-704-159-46

Query Match 99.6%; Score 2340; DB 1; Length 472;  
 Best Local Similarity 99.5%; Pred. No. 2.8e-205;  
 Matches 438; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 MANKYSEILLNLLRYKDNLDLGSYGAKVEYDGVVLDNDKQKFLTSSANSKIRV 50  
 DB 33 MFKNYSEILLNLLRYKDNLDLGSYGAKVEYDGVVLDNDKQKFLTSSANSKIRV 92  
 QY 61 TQONLIFNSVFLDFSVFIRPKYKNDGIONYIHNEYTIINCMMKNSGWKISIRGNRI 120  
 DB 93 TQONLIFNSVFLDFSVFIRPKYKNDGIONYIHNEYTIINCMMKNSGWKISIRGNRI 152  
 QY 121 IWTLDINGTKTSVFFEYNIREDISEYINRWFFVTITNLLNNAKIYINGKLESNTDIKI 180  
 DB 153 IWTLDINGTKTSVFFEYNIREDISEYINRWFFVTITNLLNNAKIYINGKLESNTDIKI 212  
 QY 181 REVANGEIIFKLDGDDRTQFIWMKYFSIFNTELSQSNIEERYKIQSYEYLKDFWGNP 240  
 DB 213 REVANGEIIFKLDGDDRTQFIWMKYFSIFNTELSQSNIEERYKIQSYEYLKDFWGNP 272  
 QY 241 LMWKEYYMFNAGNKNYSYIKLKDPSVGEILTRSKYNQNSKYINRYDLVIGKFIIRRS 300  
 DB 273 LMWKEYYMFNAGNKNYSYIKLKDPSVGEILTRSKYNQNSKYINRYDLVIGKFIIRRS 332  
 QY 301 NSQSINDDIVRKEDIYLDFFNLQNEWRVYTYKFKKEEKLFLAPISDSDELYNTIQIK 360  
 DB 333 NSQSINDDIVRKEDIYLDFFNLQNEWRVYTYKFKKEEKLFLAPISDSDELYNTIQIK 392  
 QY 361 EYDEQPTYSCOLLFKKDEESTDEIGLIGIHRFYESGIVFEEYKDYFCISKWYLKEVKRKP 420  
 DB 393 EYDEQPTYSCOLLFKKDEESTDEIGLIGIHRFYESGIVFEEYKDYFCISKWYLKEVKRKP 452  
 QY 421 YNLKLGCNWQFIPKDEGWE 440  
 DB 453 YNLKLGCNWQFIPKDEGWE 472

RESULT 5  
 US-10-271-012-46  
 Sequence 46, Application US/10271012  
 GENERAL INFORMATION:  
 APPLICANT: Williams, James A.  
 APPLICANT: Thalley, Bruce S.  
 TITLE OF INVENTION: Multivalent Vaccine For Clostridium  
 TITLE OF INVENTION: Botulinum Neurotoxin  
 NUMBER OF SEQUENCES: 82  
 CORRESPONDENCE ADDRESS:  
 ADDRESS: Medlen & Carroll  
 STREET: 220 Montgomery Street, Suite 2200  
 CITY: San Francisco  
 STATE: California

COUNTRY: United States of America  
ZIP: 94104  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/10/271,012  
FILING DATE: 15-Oct-2002  
CLASSIFICATION: <Unknown>  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US/08/704,159  
FILING DATE: <Unknown>  
ATTORNEY/AGENT INFORMATION:  
NAME: Ingolia, Diane E.  
REGISTRATION NUMBER: 40,027  
REFERENCE/DOCKET NUMBER: OHF-02304  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 705-8410  
TELEFAX: (415) 397-8338  
INFORMATION FOR SEQ ID NO: 46:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 472 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
SEQUENCE DESCRIPTION: SEQ ID NO: 46:  
US-10-271-012-46

Query Match 99.6%; Score 2340; DB 26; Length 472;  
Best Local Similarity 99.5%; Pred. No. 2.8e-205;  
Matches 438; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 MANKYSEILNLIILNRYKDNLDLSYGAKVEYDGVDELNDKNOFKLTSSANSKIRV 60  
DB 33 MFNKYSEILNLIILNRYKDNLDLSYGAKVEYDGVDELNDKNOFKLTSSANSKIRV 92  
QY 61 TQNTQIFNSVFLDVSFWIRPKYKNDGIONYIHNEYTTINCMKNNSGKWSIRGNRI 120  
DB 93 TQNTQIFNSVFLDVSFWIRPKYKNDGIONYIHNEYTTINCMKNNSGKWSIRGNRI 152  
QY 121 IWTLDINGKTSVFFPEYNIREDISEYINRWFFVITNNLNNAKIYINGKLESNTDIKI 180  
DB 153 IWTLDINGKTSVFFPEYNIREDISEYINRWFFVITNNLNNAKIYINGKLESNTDIKI 212  
QY 181 REVIANGEIIFKLDGIDRTQFIWMKYFISFNTLSQSNIEERYKIQSYSEYLDKDFWGNP 240  
DB 213 REVIANGEIIFKLDGIDRTQFIWMKYFISFNTLSQSNIEERYKIQSYSEYLDKDFWGNP 272  
QY 241 LMNKEYMFNAGNKNYSYIKLAKDSPVGEILTRSKYNQNSKYINRYDLYIGEKFTIRKRS 300  
DB 273 LMNKEYMFNAGNKNYSYIKLAKDSPVGEILTRSKYNQNSKYINRYDLYIGEKFTIRKRS 332  
QY 301 NSQSINDDIVRKEDIYLDFFNLNQEWRYVYTKYFKKEEKLFLAPISDSDELYNTIOIK 360  
DB 333 NSQSINDDIVRKEDIYLDFFNLNQEWRYVYTKYFKKEEKLFLAPISDSDELYNTIOIK 392  
QY 361 EYDEQPTYSQCLLFKKDEESTDEIGLIGHRYFESSIVFEYKDYFCISKWYLVKVRKRP 420  
DB 393 EYDEQPTYSQCLLFKKDEESTDEIGLIGHRYFESSIVFEYKDYFCISKWYLVKVRKRP 452  
QY 421 YNLKLCGNWQFIPKDEGWE 440  
DB 453 YNLKLCGNWQFIPKDEGWE 472

RESULT 6  
US-08-123-975A-2  
; Sequence 2, Application US/08123975A  
; GENERAL INFORMATION:  
; APPLICANT: Middlebrook, John L  
; APPLICANT: Lapenotiere, Hugh F

APPLICANT: Clayton, Michael A  
APPLICANT: Brown, Douglas R  
TITLE OF INVENTION: POLYPEPTIDE FUSION PRODUCT AS VACCINE  
TITLE OF INVENTION: AGAINST C. BOTULINUM  
NUMBER OF SEQUENCES: 6  
CORRESPONDENCE ADDRESS:  
ADDRESSSEE: John F. Moran  
STREET: Off. of Command Jdg. Adv.  
CITY: Fredrick  
STATE: Maryland  
COUNTRY: USA  
ZIP: 21702-5012  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/123,975A  
FILING DATE: 21-SEP-1993  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: Hendricks, Glenna  
REGISTRATION NUMBER: 32,535  
REFERENCE/DOCKET NUMBER: mid.1  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (301) 619-2065  
TELEFAX: (301) 619-7714  
INFORMATION FOR SEQ ID NO: 2:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 850 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: peptide  
HYPOTHETICAL: NO  
FRAGMENT TYPE: N-terminal  
ORIGINAL SOURCE:  
ORGANISM: heavy chain of serotyp B botulinum toxin  
US-08-123-975A-2

Query Match 99.6%; Score 2340; DB 5; Length 850;  
Best Local Similarity 99.5%; Pred. No. 5.6e-205;  
Matches 438; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 MANKYSEILNLIILNRYKDNLDLSYGAKVEYDGVDELNDKNOFKLTSSANSKIRV 60  
DB 411 MFNKYSEILNLIILNRYKDNLDLSYGAKVEYDGVDELNDKNOFKLTSSANSKIRV 470  
QY 61 TQNTQIFNSVFLDVSFWIRPKYKNDGIONYIHNEYTTINCMKNNSGKWSIRGNRI 120  
DB 471 TQNTQIFNSVFLDVSFWIRPKYKNDGIONYIHNEYTTINCMKNNSGKWSIRGNRI 530  
QY 121 IWTLDINGKTSVFFPEYNIREDISEYINRWFFVITNNLNNAKIYINGKLESNTDIKI 180  
DB 531 IWTLDINGKTSVFFPEYNIREDISEYINRWFFVITNNLNNAKIYINGKLESNTDIKI 590  
QY 181 REVIANGEIIFKLDGIDRTQFIWMKYFISFNTLSQSNIEERYKIQSYSEYLDKDFWGNP 240  
DB 591 REVIANGEIIFKLDGIDRTQFIWMKYFISFNTLSQSNIEERYKIQSYSEYLDKDFWGNP 650  
QY 241 LMNKEYMFNAGNKNYSYIKLAKDSPVGEILTRSKYNQNSKYINRYDLYIGEKFTIRKRS 300  
DB 651 LMNKEYMFNAGNKNYSYIKLAKDSPVGEILTRSKYNQNSKYINRYDLYIGEKFTIRKRS 710  
QY 301 NSQSINDDIVRKEDIYLDFFNLNQEWRYVYTKYFKKEEKLFLAPISDSDELYNTIOIK 360  
DB 711 NSQSINDDIVRKEDIYLDFFNLNQEWRYVYTKYFKKEEKLFLAPISDSDELYNTIOIK 770  
QY 361 EYDEQPTYSQCLLFKKDEESTDEIGLIGHRYFESSIVFEYKDYFCISKWYLVKVRKRP 420  
DB 771 EYDEQPTYSQCLLFKKDEESTDEIGLIGHRYFESSIVFEYKDYFCISKWYLVKVRKRP 830

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QY 421 YNLKLCNQWQFIPKDEGWT 440
Db 831 YNLKLCNQWQFIPKDEGWT 850

RESULT 7
US-09-831-050-4
; Sequence 4, Application US/09831050
; GENERAL INFORMATION:
; APPLICANT: SHONE, Clifford Charles
; APPLICANT: SUTTON, John Mark
; APPLICANT: HALLIS, Bassam
; APPLICANT: SILMAN, Nigel
; TITLE OF INVENTION: Delivery of Superoxide Dismutase to Neuronal Cells
; FILE REFERENCE: 1581.0800000
; CURRENT APPLICATION NUMBER: US/09/831,050
; PRIOR FILING DATE: 1999-11-05
; PRIOR FILING DATE: 1998-11-05
; NUMBER OF SEQ ID NOS: 11
; SOFTWARE: Patent in Ver. 2.1
; SEQ ID NO 4
; LENGTH: 1070
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:construct
US-09-831-050-4

Query Match 99.6%; Score 2340; DB 22; Length 1070;
Best Local Similarity 99.5%; Pred. No. 9.3e-205;
Matches 438; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 MANKYSEILNLIILRYKDNLDLSCYGAKEVYDGVDELNDKNQKLTSSANSKIRV 60
Db 631 MFKNYSEILNLIILRYKDNLDLSCYGAKEVYDGVDELNDKNQKLTSSANSKIRV 690
QY 61 TQONQIFNSVFLDFSVFWIRPKYKNDGIONYIHNEYTIINCNNKNSGKISIRGNRI 120
Db 691 TQONQIFNSVFLDFSVFWIRPKYKNDGIONYIHNEYTIINCNNKNSGKISIRGNRI 750
QY 121 IWTLDINGKTSVFEYFNREDISEYINRWFFVTITNNLNNAKIYINGKLESNTDIKDI 180
Db 751 IWTLDINGKTSVFEYFNREDISEYINRWFFVTITNNLNNAKIYINGKLESNTDIKDI 810
QY 181 REVIANGEIIFKLDGIDRTQFIWMKYFSIFNTELSQSNIEERYKIQSYSEYKDFWGNP 240
Db 811 REVIANGEIIFKLDGIDRTQFIWMKYFSIFNTELSQSNIEERYKIQSYSEYKDFWGNP 870
QY 241 LMNKEYYMFNAGNKNYSIKLKDPSVGEILTRSKYNQNSKYINRYDLYIGKEFTIRKS 300
Db 871 LMNKEYYMFNAGNKNYSIKLKDPSVGEILTRSKYNQNSKYINRYDLYIGKEFTIRKS 930
QY 301 NSQSIINDIVRKEDYIYLDPFNLNQEWRYTYKYFKKEEKLFLAPISDSDELYNTIOIK 360
Db 931 NSQSIINDIVRKEDYIYLDPFNLNQEWRYTYKYFKKEEKLFLAPISDSDELYNTIOIK 990
QY 361 EYDQPTYSQQLFKKDEESTDEIGLIGHRYFESGIVFEYKDYFCISKWYLKVKRKP 420
Db 991 EYDQPTYSQQLFKKDEESTDEIGLIGHRYFESGIVFEYKDYFCISKWYLKVKRKP 1050
QY 421 YNLKLCNQWQFIPKDEGWT 440
Db 1051 YNLKLCNQWQFIPKDEGWT 1070

RESULT 8
US-09-831-050-7
; Sequence 7, Application US/09831050
; GENERAL INFORMATION:
; APPLICANT: SHONE, Clifford Charles
; APPLICANT: SUTTON, John Mark
; APPLICANT: HALLIS, Bassam

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; APPLICANT: SILMAN, Nigel
; TITLE OF INVENTION: Delivery of Superoxide Dismutase to Neuronal Cells
; FILE REFERENCE: 1581.0800000
; CURRENT APPLICATION NUMBER: US/09/831,050
; CURRENT FILING DATE: 1999-11-05
; PRIOR FILING DATE: 1998-11-05
; NUMBER OF SEQ ID NOS: 11
; SOFTWARE: Patent in Ver. 2.1
; SEQ ID NO 7
; LENGTH: 1095
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:construct
US-09-831-050-7

Query Match 99.6%; Score 2340; DB 22; Length 1095;
Best Local Similarity 99.5%; Pred. No. 9.6e-205;
Matches 438; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 MANKYSEILNLIILRYKDNLDLSCYGAKEVYDGVDELNDKNQKLTSSANSKIRV 60
Db 656 MFKNYSEILNLIILRYKDNLDLSCYGAKEVYDGVDELNDKNQKLTSSANSKIRV 715
QY 61 TQONQIFNSVFLDFSVFWIRPKYKNDGIONYIHNEYTIINCNNKNSGKISIRGNRI 120
Db 716 TQONQIFNSVFLDFSVFWIRPKYKNDGIONYIHNEYTIINCNNKNSGKISIRGNRI 775
QY 121 IWTLDINGKTSVFEYFNREDISEYINRWFFVTITNNLNNAKIYINGKLESNTDIKDI 180
Db 776 IWTLDINGKTSVFEYFNREDISEYINRWFFVTITNNLNNAKIYINGKLESNTDIKDI 835
QY 181 REVIANGEIIFKLDGIDRTQFIWMKYFSIFNTELSQSNIEERYKIQSYSEYKDFWGNP 240
Db 836 REVIANGEIIFKLDGIDRTQFIWMKYFSIFNTELSQSNIEERYKIQSYSEYKDFWGNP 895
QY 241 LMNKEYYMFNAGNKNYSIKLKDPSVGEILTRSKYNQNSKYINRYDLYIGKEFTIRKS 300
Db 896 LMNKEYYMFNAGNKNYSIKLKDPSVGEILTRSKYNQNSKYINRYDLYIGKEFTIRKS 955
QY 301 NSQSIINDIVRKEDYIYLDPFNLNQEWRYTYKYFKKEEKLFLAPISDSDELYNTIOIK 360
Db 956 NSQSIINDIVRKEDYIYLDPFNLNQEWRYTYKYFKKEEKLFLAPISDSDELYNTIOIK 1015
QY 361 EYDQPTYSQQLFKKDEESTDEIGLIGHRYFESGIVFEYKDYFCISKWYLKVKRKP 420
Db 1016 EYDQPTYSQQLFKKDEESTDEIGLIGHRYFESGIVFEYKDYFCISKWYLKVKRKP 1075
QY 421 YNLKLCNQWQFIPKDEGWT 440
Db 1076 YNLKLCNQWQFIPKDEGWT 1095

RESULT 9
PCT-US97-15394-42
; Sequence 42, Application PC/TUS9715394
; GENERAL INFORMATION:
; APPLICANT: Williams, James A.
; APPLICANT: Thallsey, Bruce S.
; TITLE OF INVENTION: Multivalent Vaccine For Clostridium
; TITLE OF INVENTION: Botulinum Neurotoxin
; NUMBER OF SEQUENCES: 82
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Medlen & Carroll
; STREET: 220 Montgomery Street, Suite 2200
; CITY: San Francisco
; STATE: California
; COUNTRY: United States of America
; ZIP: 94104
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible

```





STREET: 220 Montgomery Street, Suite 2200  
CITY: San Francisco  
STATE: California  
COUNTRY: United States of America  
ZIP: 94104  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/10/271,012  
FILING DATE: 15-Oct-2002  
CLASSIFICATION: <Unknown>  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US/08/704,159  
FILING DATE: <Unknown>  
ATTORNEY/AGENT INFORMATION:  
NAME: Ingolia, Diane E.  
REGISTRATION NUMBER: 40,027  
REFERENCE/DOCKET NUMBER: OPHD-02304  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 705-8410  
TELEFAX: (415) 397-8338  
INFORMATION FOR SEQ ID NO: 42:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 1291 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
SEQUENCE DESCRIPTION: SEQ ID NO: 42:  
US00-271-012-42  
Query Match 99.6%; Score 2340; DB 26; Length 1291;  
Best Local Similarity 99.5%; Pred. No. 1.2e-204;  
Matches 438; Conservative 0; Mismatches 2; Indels 0; Gaps 0;  
1 MANKYSEILNLIILRYKNNLIDLSYGAKVEYDVGVELNDKQFKLTSSANSKIRV 50  
852 MFNKYSEILNLIILRYKNNLIDLSYGAKVEYDVGVELNDKQFKLTSSANSKIRV 911  
61 TONQNIIFNSVFLDFSVPFIRPKYKNDGIQYIHNEYTIINCMKNNSGKISIRGNRI 120  
912 TONQNIIFNSVFLDFSVPFIRPKYKNDGIQYIHNEYTIINCMKNNSGKISIRGNRI 971  
121 IWTLDINGTKTSVFFPYNIREDISYINRWFFVTITNNLNNAKIYINGKLESNTDIKI 180  
972 IWTLDINGTKTSVFFPYNIREDISYINRWFFVTITNNLNNAKIYINGKLESNTDIKI 1031  
181 REVIANGEIIFKLDGIDRTQFTWMKYFSIFNTELSQSIIEERYKIQSYSEYLDKFWGNP 240  
1032 REVIANGEIIFKLDGIDRTQFTWMKYFSIFNTELSQSIIEERYKIQSYSEYLDKFWGNP 1091  
241 LMNYEYMFNAGNKNYSYIKLKQSPVGEILTRSKYNSQNSKIYINRDLYIGKEFIIRKKS 300  
1092 LMNYEYMFNAGNKNYSYIKLKQSPVGEILTRSKYNSQNSKIYINRDLYIGKEFIIRKKS 1151  
301 NSQINDDIVRKEDYIYLDFFNLQEWVRVYVYKFKKEEKLFLAPISDSDELYNTIQIK 360  
1152 NSQINDDIVRKEDYIYLDFFNLQEWVRVYVYKFKKEEKLFLAPISDSDELYNTIQIK 1211  
361 EYDQPTYSQCLLFKDEESTDEIGLIGHRFYSGIVFEYKDYFCISKWYLKVEYKRRP 420  
1212 EYDQPTYSQCLLFKDEESTDEIGLIGHRFYSGIVFEYKDYFCISKWYLKVEYKRRP 1271  
421 YNLKLGNCWQPIPKDEGWT 440  
1272 YNLKLGNCWQPIPKDEGWT 1291  
RESULT 12  
US-08-123-975A-5  
; Sequence 5, Application US/08123975A

GENERAL INFORMATION:  
APPLICANT: Middlebrook, John L  
APPLICANT: Lapenotiere, Hugh F  
APPLICANT: Clayton, Michael A  
APPLICANT: Brown, Douglas R  
TITLE OF INVENTION: POLYPEPTIDE FUSION PRODUCT AS VACCINE  
TITLE OF INVENTION: AGAINST C. BOTULINUM  
NUMBER OF SEQUENCES: 6  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: John F. Moran  
STREET: Off. of Command Jdg. Adv.  
CITY: Fredrick  
STATE: Maryland  
COUNTRY: USA  
ZIP: 21702-5012  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/123,975A  
FILING DATE: 21-Sep-1993  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: Hendricks, Glenna  
REGISTRATION NUMBER: 32,535  
REFERENCE/DOCKET NUMBER: mid.1  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (301) 619-2065  
TELEFAX: (301) 619-7714  
INFORMATION FOR SEQ ID NO: 5:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 439 amino acids  
TYPE: amino acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
HYPOTHETICAL: NO  
ANTI-SENSE: NO  
FRAGMENT TYPE: N-terminal  
ORIGINAL SOURCE:  
ORGANISM: Clostridium botulinum toxin  
US-08-123-975A-5  
Query Match 99.4%; Score 2337; DB 5; Length 439;  
Best Local Similarity 99.8%; Pred. No. 4.7e-205;  
Matches 437; Conservative 0; Mismatches 1; Indels 0; Gaps 0;  
3 NKYNSEILNLIILRYKNNLIDLSYGAKVEYDVGVELNDKQFKLTSSANSKIRVTO 62  
2 NKYNSEILNLIILRYKNNLIDLSYGAKVEYDVGVELNDKQFKLTSSANSKIRVTO 61  
63 NONIFNSVFLDFSVPFIRPKYKNDGIQYIHNEYTIINCMKNNSGKISIRGNRIW 122  
62 NONIFNSVFLDFSVPFIRPKYKNDGIQYIHNEYTIINCMKNNSGKISIRGNRIW 121  
123 TLIDINGTKTSVFFPYNIREDISYINRWFFVTITNNLNNAKIYINGKLESNTDIKIRE 182  
122 TLIDINGTKTSVFFPYNIREDISYINRWFFVTITNNLNNAKIYINGKLESNTDIKIRE 181  
183 VIANGEIIFKLDGIDRTQFTWMKYFSIFNTELSQSIIEERYKIQSYSEYLDKFWGNPLM 242  
182 VIANGEIIFKLDGIDRTQFTWMKYFSIFNTELSQSIIEERYKIQSYSEYLDKFWGNPLM 241  
243 YNKEYYMFNAGNKNYSYIKLKQSPVGEILTRSKYNSQNSKIYINRDLYIGKEFIIRKKS 302  
242 YNKEYYMFNAGNKNYSYIKLKQSPVGEILTRSKYNSQNSKIYINRDLYIGKEFIIRKKS 301  
303 QSINDDIVRKEDYIYLDFFNLQEWVRVYVYKFKKEEKLFLAPISDSDELYNTIQIK 362  
302 QSINDDIVRKEDYIYLDFFNLQEWVRVYVYKFKKEEKLFLAPISDSDELYNTIQIK 361

QY 363 DEOPTYSCOLLFKKDEESTDEIGLIHRFYESGIVFEYKDYFCISKWYLKEVKRKPYN 422  
DB 362 DEOPTYSCOLLFKKDEESTDEIGLIHRFYESGIVFEYKDYFCISKWYLKEVKRKPYN 421  
QY 423 LKLCNWFQIPKDEGWTE 440  
DB 422 LKLCNWFQIPKDEGWTE 439

RESULT 13  
US-09-611-419A-40  
; Sequence 40, Application US/09611419A  
; GENERAL INFORMATION:  
; APPLICANT: Smith, Leonard A.  
; APPLICANT: Byrne, Michael P.  
; APPLICANT: Middlebrook, John L.  
; APPLICANT: Lapenotiere, Hugh  
; APPLICANT: Clayton, Michael A.  
; APPLICANT: Brown, Douglas R.  
; TITLE OF INVENTION: RECOMBINANT VACCINE AGAINST BOTULINUM  
; TITLE OF INVENTION: NEUROTOXIN  
; FILE REFERENCE: A33626 067252.0105  
; CURRENT APPLICATION NUMBER: US/09/611,419A  
; CURRENT FILING DATE: 2000-07-06  
; PRIOR APPLICATION NUMBER: PCT/US00/12890  
; PRIOR FILING DATE: 2000-05-12  
; PRIOR APPLICATION NUMBER: 60/133,865  
; PRIOR FILING DATE: 1999-05-12  
; PRIOR APPLICATION NUMBER: 60/133,866  
; PRIOR FILING DATE: 1999-05-12  
; PRIOR APPLICATION NUMBER: 60/133,867  
; PRIOR FILING DATE: 1999-05-12  
; PRIOR APPLICATION NUMBER: 60/133,868  
; PRIOR FILING DATE: 1999-05-12  
; PRIOR APPLICATION NUMBER: 60/133,869  
; PRIOR FILING DATE: 1999-05-12  
; PRIOR APPLICATION NUMBER: 60/146,192  
; PRIOR FILING DATE: 1999-07-29  
; NUMBER OF SEQ ID NOS: 42  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 40  
; LENGTH: 436  
; TYPE: PRT  
; ORGANISM: Clostridium botulinum  
US-09-611-419A-40

Query Match 97.2%; Score 2283.5; DB 20; Length 436;  
Best Local Similarity 99.1%; Pred. No. 3.8e-200;  
Matches 434; Conservative 0; Mismatches 1; Indels 3; Gaps 3;  
QY 3 NKYNSEILNNILNRYKDNLDLSCYGAKEVYDGVDELNDKNQFKLTSSANSKIRVTQ 62  
DB 2 NKYNSEILNNILNRYKDNLDLSCYGAKEVYDGVDELNDKNQFKLTSSANSKIRVTQ 61  
QY 63 NQNTIFNSVFLDSVSWIRIPKYKNDGQIYHNEYTIINCMKNNSGKWIIRGNRI 122  
DB 62 NQNTIFNSVFLDSVSWIRIPKYKNDGQIYHNEYTIINCMKNNSGKWIIRGNRI 120  
QY 123 TLIDINGTKSVFPEYNIREDISEYINRWFFVTITNNLNNAKIYINGKLESNTDIDKI 182  
DB 121 TLIDINGTKSVFPEYNIREDISEYINRWFFVTITNNLNNAKIYINGKLESNTDIDKI 180  
QY 183 VIANGEIIFKLDGIDRTQFTWMKYFSIFNTELSQSNIBERYKIQSYSEYKDFWGNPLM 242  
DB 181 VIANGEIIFKLDGIDRTQFTWMKYFSIFNTELSQSNIBERYKIQSYSEYKDFWGNPLM 240  
QY 243 YNKYYMFNAGNKNYSYIKLKDDSPVGEILTRSKYNSKYINRDLYIGEKFTIRKKSNS 302  
DB 241 YNKYYMFNAGNKNYSYIKLKDDSPVGEILTRSKYNSKYINRDLYIGEKFTIRKKSNS 300  
QY 303 QSIINDIVRKEDYIYLDFFNLQEWRYTYKYFKKEEKLFLAPISDSDELYNTIQIKEY 362  
DB 301 QSIINDIVRKEDYIYLDFFNLQEWRYTYKYFKKEEKLFLAPISDSDELYNTIQIKEY 358

QY 363 DEOPTYSCOLLFKKDEESTDEIGLIHRFYESGIVFEYKDYFCISKWYLKEVKRKPYN 422  
DB 359 DEOPTYSCOLLFKKDEESTDEIGLIHRFYESGIVFEYKDYFCISKWYLKEVKRKPYN 418  
QY 423 LKLCNWFQIPKDEGWTE 440  
DB 419 LKLCNWFQIPKDEGWTE 436

RESULT 14  
US-09-611-419A-42  
; Sequence 42, Application US/09611419A  
; GENERAL INFORMATION:  
; APPLICANT: Smith, Leonard A.  
; APPLICANT: Byrne, Michael P.  
; APPLICANT: Middlebrook, John L.  
; APPLICANT: Lapenotiere, Hugh  
; APPLICANT: Clayton, Michael A.  
; APPLICANT: Brown, Douglas R.  
; TITLE OF INVENTION: RECOMBINANT VACCINE AGAINST BOTULINUM  
; TITLE OF INVENTION: NEUROTOXIN  
; FILE REFERENCE: A33626 067252.0105  
; CURRENT APPLICATION NUMBER: US/09/611,419A  
; CURRENT FILING DATE: 2000-07-06  
; PRIOR APPLICATION NUMBER: PCT/US00/12890  
; PRIOR FILING DATE: 2000-05-12  
; PRIOR APPLICATION NUMBER: 60/133,865  
; PRIOR FILING DATE: 1999-05-12  
; PRIOR APPLICATION NUMBER: 60/133,866  
; PRIOR FILING DATE: 1999-05-12  
; PRIOR APPLICATION NUMBER: 60/133,867  
; PRIOR FILING DATE: 1999-05-12  
; PRIOR APPLICATION NUMBER: 60/133,868  
; PRIOR FILING DATE: 1999-05-12  
; PRIOR APPLICATION NUMBER: 60/133,869  
; PRIOR FILING DATE: 1999-05-12  
; PRIOR APPLICATION NUMBER: 60/146,192  
; PRIOR FILING DATE: 1999-07-29  
; NUMBER OF SEQ ID NOS: 42  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 42  
; LENGTH: 843  
; TYPE: PRT  
; ORGANISM: Clostridium botulinum  
US-09-611-419A-42

Query Match 94.8%; Score 2227.5; DB 20; Length 843;  
Best Local Similarity 98.0%; Pred. No. 1.4e-194;  
Matches 431; Conservative 0; Mismatches 2; Indels 7; Gaps 7;  
QY 1 MANKYSEILNNILNRYKDNLDLSCYGAKEVYDGVDELNDKNQFKLTSSANSKIRV 60  
DB 411 MANKYSEILNNILNRYKDNLDLSCYGAKEVYDGVDELNDKNQFKLTSSANSKIRV 469  
QY 61 TQNTIFNSVFLDSVSWIRIPKYKNDGQIYHNEYTIINCMKNNSGKWIIRGNRI 120  
DB 470 TQNTIFNSVFLDSVSWIRIPKYKNDGQIYHNEYTIINCMKNNSGKWIIRGNRI 528  
QY 121 IWLIDINGTKSVFPEYNIREDISEYINRWFFVTITNNLNNAKIYINGKLESNTDIDKI 180  
DB 529 IWLIDINGTKSVFPEYNIREDISEYINRWFFVTITNNLNNAKIYINGKLESNTDIDKI 588  
QY 181 REVIANGEIIFKLDGIDRTQFTWMKYFSIFNTELSQSNIBERYKIQSYSEYKDFWGNP 240  
DB 589 REVIANGEIIFKLDGIDRTQFTWMKYFSIFNTELSQSNIBERYKIQSYSEYKDFWGNP 648  
QY 241 LMTNKEYMFNAGNKNYSYIKLKDDSPVGEILTRSKYNSKYINRDLYIGEKFTIRKKS 300  
DB 649 LMTNKEYMFNAGNKNYSYIKLKDDSPVGEILTRSKYNSKYINRDLYIGEKFTIRKKS 708  
QY 301 NSQSINDIVRKEDYIYLDFFNLQEWRYTYKYFKKEEKLFLAPISDSDELYNTIQI 360

Db 709 NSQINDDIVRKEDYIYLDFFNQNQWRVYTYKYFKKEE-LFLAPISDSDEFYNTIQIK 767  
QY 361 EYDEQPTYSQCLLFKKDEESTDEIGLIGHREYSGIVFEYKDYFCISKWYLKVRKRP 420  
Db 768 EYDEQPTYSQCLLFKKDEESTDEIGLIGHREYSGIVFEE-KD-FCIS-WYL-EVKRKP 823  
QY 421 YNLKLGNCNQFIPKDEGWTE 440  
Db 824 YNLKLGNCNQFIPKDEGWTE 843

RESULT 15  
PCT-US97-15394-44  
Sequence 44, Application PC/TU59715394  
GENERAL INFORMATION:  
APPLICANT: Williams, James A.  
APPLICANT: Thalley, Bruce S.  
TITLE OF INVENTION: Multivalent Vaccine For Clostridium  
TITLE OF INVENTION: Botulinum Neurotoxin  
NUMBER OF SEQUENCES: 82  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Medlen & Carroll  
STREET: 220 Montgomery Street, Suite 2200  
CITY: San Francisco  
STATE: California  
COUNTRY: United States of America  
ZIP: 94104  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent In Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: PCT/US97/15394  
FILING DATE:  
CLASSIFICATION:  
ATTORNEY/AGENT INFORMATION:  
NAME: Ingolia, Diane E.  
REGISTRATION NUMBER: 40,027  
REFERENCE/DOCKET NUMBER: OPHD-02304  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 705-8410  
TELEFAX: (415) 397-8338  
INFORMATION FOR SEQ ID NO: 44:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 472 amino acids  
TYPE: amino acid  
TOPOLOGY: linear  
MOLECULE TYPE: protein  
PCT-US97-15394-44

Query Match 89.4%; Score 2102; DB 1; Length 472;  
Best Local Similarity 88.6%; Pred. No. 1.9e-183;  
Matches 390; Conservative 26; Mismatches 24; Indels 0; Gaps 0;

QY 1 MANKYSEILNLIILNRYKDNLDLDSGYGAKVEYDGVDELNDKNQFKLTSSANSKIRV 60  
Db 33 MFNKYSEILNLIILNRYKDNLDLDSGYGAKVEYDGVDELNDKNQFKLTSSANSKIRV 92  
QY 61 TQNONIIFNSVFDVSFSEWIRIPKYKNDGIONYIHNEYTIINCCKNNSGWKISIRGNRI 120  
Db 93 TQNONIIFNSVFDVSFSEWIRIPKYKNDGIONYIHNEYTIINCCKNNSGWKISIRGNRI 152  
QY 121 IWLIDINGTKSVFFFEYNREDISEYINRWFFVTITNNLNNAKIYINGKLESNTDIKDI 180  
Db 153 IWLIDINGTKSVFFFEYNREDISEYINRWFFVTITNNLNNAKIYINGKLESNTDIKDI 212  
QY 181 REVIANGEILFKLDGIDRQFIMWKYFSIFNTELSQSNIEERYKIQSYSEYKDFWGNP 240  
Db 213 GEVINGEITFKLDGVDRTQFIMWKYFSIFNTELSQSNIEERYKIQSYSEYKDFWGNP 272  
QY 241 LMYNKEYMEFNAGKNNSYIKLKDPSVGEILTRSKYNQNSKYINRYDLIYIGKFIIRKS 300

Db 273 LMTNKYYMFNAGKNNSYIKLVKDSVGEILTRSKYNQNSKYINRYDLIYIGKFIIRRES 332  
QY 301 NSQINDDIVRKEDYIYLDFFNQNQWRVYTYKYFKKEEKLFLAPISDSDELNTIQIK 360  
Db 333 NSQINDDIVRKEDYIHLDLVLHHEWRYVYAYKFKQEOKLFLSIISDSNEFYKTIETK 392  
QY 361 EYDEOPTYSQCLLFKKDEESTDEIGLIGHREYSGIVFEYKDYFCISKWYLKVRKRP 420  
Db 393 EYDEQPTYSQCLLFKKDEESTDDIGLIGHREYSGVLKRYKDYFCISKWYLKVRKRP 452  
QY 421 YNLKLGNCNQFIPKDEGWTE 440  
Db 453 YKSNLGCNQFIPKDEGWTE 472

Search completed: November 1, 2002, 08:22:56  
Job time : 294 secs

GenCore version 5.1.3  
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OM protein - protein search, using sw model

Run on: November 1, 2002, 08:15:33 ; Search time 12 Seconds  
(without alignments)  
66.157 Million cell updates/sec

Title: US-09-910-186a-8  
Perfect score: 2350  
Sequence: 1 MANKYSEILNIIILRYK.....YNLKGNCWQIFKDEGWIE 440

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Sequences: 7643 seqs, 1804274 residues

Total number of hits satisfying chosen parameters: 7643

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database: Pending\_Patents\_AA\_Nev.\*

- 1: /cgn2\_6/ptodata/1/paa/PCT\_NEW\_COMB.pep.\*
- 2: /cgn2\_6/ptodata/1/paa/US06\_NEW\_COMB.pep.\*
- 3: /cgn2\_6/ptodata/1/paa/US07\_NEW\_COMB.pep.\*
- 4: /cgn2\_6/ptodata/1/paa/US08\_NEW\_COMB.pep.\*
- 5: /cgn2\_6/ptodata/1/paa/US09\_NEW\_COMB.pep.\*
- 6: /cgn2\_6/ptodata/1/paa/US10\_NEW\_COMB.pep.\*
- 7: /cgn2\_6/ptodata/1/paa/US60\_NEW\_COMB.pep.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result	Score	Query Match	Length	DB ID	Description
1	124	5.3	878	6	US-10-092-411A-4378
2	117	5.0	428	6	US-10-092-411A-2942
3	115.5	4.9	912	6	US-10-092-411A-2993
4	115.5	4.9	3696	6	US-10-092-411A-5080
5	114.5	4.9	608	6	US-10-092-411A-4751
6	111	4.7	321	6	US-10-092-411A-2890
7	110	4.7	454	6	US-10-085-198-22
8	109.5	4.7	518	6	US-10-092-411A-4348
9	109	4.6	384	6	US-10-092-411A-4669
10	108.5	4.6	564	6	US-10-092-411A-3930
11	108	4.6	406	6	US-10-092-411A-3544
12	107.5	4.6	331	6	US-10-092-411A-3626
13	104.5	4.4	406	6	US-10-143-087A-309
14	103.5	4.4	703	6	US-10-092-411A-3015
15	102.5	4.4	570	6	US-10-092-411A-2972
16	102.5	4.4	1162	6	US-10-092-411A-4008
17	102.5	4.4	1177	6	US-10-092-411A-5106
18	102	4.3	956	6	US-10-092-411A-4452
19	102	4.3	990	6	US-10-083-198-154
20	101	4.3	670	6	US-10-092-411A-2940
21	101	4.3	10182	6	US-10-092-411A-3159
22	100	4.3	460	6	US-10-092-411A-5322
23	100	4.3	485	6	US-10-092-411A-4294
24	100	4.3	876	6	US-10-092-411A-3943
25	99.5	4.2	870	6	US-10-092-411A-4959
26	99.5	4.2	1211	6	US-10-092-411A-4820

27	98.5	4.2	425	6	US-10-092-411A-5654	Sequence 5654, Ap
28	98	4.2	659	6	US-10-092-411A-5537	Sequence 5537, Ap
29	97.5	4.1	405	6	US-10-092-411A-5259	Sequence 5259, Ap
30	96.5	4.1	312	6	US-10-092-411A-3465	Sequence 3465, Ap
31	96.5	4.1	471	6	US-10-092-411A-4125	Sequence 4125, Ap
32	96.5	4.1	509	6	US-10-092-411A-2996	Sequence 2996, Ap
33	96.5	4.1	1010	6	US-10-092-411A-5178	Sequence 5178, Ap
34	96	4.1	502	6	US-10-092-411A-4511	Sequence 4511, Ap
35	96	4.1	695	6	US-10-092-411A-4341	Sequence 4341, Ap
36	96	4.1	804	6	US-10-092-411A-5218	Sequence 5218, Ap
37	96	4.1	901	6	US-10-092-411A-5351	Sequence 5351, Ap
38	95.5	4.1	473	6	US-10-092-411A-4773	Sequence 4773, Ap
39	95.5	4.1	591	6	US-10-092-411A-3228	Sequence 3228, Ap
40	95.5	4.1	1151	6	US-10-092-411A-3242	Sequence 3242, Ap
41	94	4.0	675	6	US-10-092-411A-4547	Sequence 4547, Ap
42	94	4.0	727	6	US-10-092-411A-4067	Sequence 4067, Ap
43	92.5	3.9	280	6	US-10-092-411A-5506	Sequence 5506, Ap
44	92.5	3.9	691	6	US-10-092-411A-4675	Sequence 4675, Ap
45	92.5	3.9	906	6	US-10-092-411A-3218	Sequence 3218, Ap

ALIGNMENTS

RESULT 1

US-10-092-411A-4378  
; Sequence 4378, Application US/10092411A  
; GENERAL INFORMATION:  
; APPLICANT: Lynn Doucette-Stamm et al  
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCC  
; FILE REFERENCE: 032796-101  
; CURRENT APPLICATION NUMBER: US/10/092.411A  
; CURRENT FILING DATE: 2002-03-07  
; PRIOR APPLICATION NUMBER: US 09/134,001  
; PRIOR FILING DATE: 1998-08-13  
; PRIOR APPLICATION NUMBER: US 60/064,964  
; PRIOR FILING DATE: 1997-11-08  
; PRIOR APPLICATION NUMBER: US 60/055,779  
; PRIOR FILING DATE: 1997-08-14  
; NUMBER OF SEQ ID NOS: 5676  
; SEQ ID NO 4378  
; LENGTH: 878  
; TYPE: PRY  
; ORGANISM: Staphylococcus epidermidis  
US-10-092-411A-4378

Query Match	5.3%	Score 124;	DB 6;	Length 878;
Best Local Similarity	19.9%	Pred. No. 0.73;		
Matches	95;	Conservative	86;	Mismatches 197; Indels 100; Gaps 17;
QY	3	NKYNSEILNIIILRYKDNIIILDS-	-----	28
Db	255	NKPSPSIDKIKISMGYLDLSLSSNLNLTIGRGTKSLIELIAYDIAPTSQNT	314	
QY	29	-----GYGAKVEYDGVDELNKNQKLTSSANSKIRVTQNNIIFNSVFLDFS	76	
Db	315	NTSFENICKSLIGIGGKVELIVTSHAQYQKQKILIKRYNEDPLIKDIDNNVSNYTKDIL	374	
QY	77	VSWIIRPKYKNDQIONYTHNEYTTINCMK-----NNSGKKISIRGNRIIWLIDING	129	
Db	375	PN-----IEVYSQNEIIDLTTNENAKLINLRFDKDRSNCKKEIKTN-----LHS	422	
QY	130	KTKSVFEYNIREDISENRWFVITNNLAN-AKIYINGKLESNTDIDKIREVIANGE	188	
Db	423	NSKSLKAKEDLENLOEKINQ--LPALKKELKHLFELGKLEVOGKISREEQYIQTK	480	
QY	189	IIFKLDGDIRTQFI-----WMKYFSIPT--EUSQSNIEERYKIQSYSEYKDKFW	237	
Db	481	QITE-DNDISITNIIILPFENYNNQIKHVEIFDSIKNTIDNHNKKLKEIKSMFTDLKDTT	539	
QY	238	GNPLMYNKEYMFNAGNKSYIKLKD-SPVGEILTRSK-----YNQNSKYINVRDLYI	290	

Db 540 QNEI--EKIYNVWKKKKNIKEINRAKSLDDIEGKTKEDIAHYETQKQIT--SIEP 595  
QY 291 GEXFIIRKSKSQSI--NDDIVRKEDYIVL---DFFNLQEWRYTYFYRKKEEKLFLAP 346  
Db 596 LETQLSRVATSIETLENRIQLKEDLKEIFDEQLKLNKRCVKKNNRYLKK--QVNKIQIP 654  
QY 347 ISDSDELYNTIQIKEYDPTSCOLLFPKKDBESDEIGLIGIHRFYESGIVFVEYKD 404  
Db 655 YANVNNLIEFLK-----EENGLGDSLTKWIKNHQSFNFPKFIKLKRDORSEAIYEYKD 708  
RESULT 2  
US-10-092-411A-2942  
; Sequence 2942, Application US/10092411A  
; GENERAL INFORMATION:  
; APPLICANT: Lynn Doucette-Stamm et al  
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS  
; TITLE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS  
; FILE REFERENCE: 032796-101  
; CURRENT APPLICATION NUMBER: US/10/092,411A  
; CURRENT FILING DATE: 2002-03-07  
; PRIOR APPLICATION NUMBER: US 09/134,001  
; PRIOR FILING DATE: 1998-08-13  
; PRIOR APPLICATION NUMBER: US 60/064,964  
; PRIOR FILING DATE: 1997-11-08  
; PRIOR APPLICATION NUMBER: US 60/055,779  
; PRIOR FILING DATE: 1997-08-14  
; NUMBER OF SEQ ID NOS: 5676  
; SEQ ID NO 2942  
; LENGTH: 428  
; TYPE: PRT  
; ORGANISM: Staphylococcus epidermidis  
US-10-092-411A-2942  
Query Match 5.0%; Score 117; DB 6; Length 428;  
Best Local Similarity 21.1%; Pred. No. 0.79;  
Matches 97; Conservative 75; Mismatches 149; Indels 138; Gaps 24;  
QY 2 ANYNSILNNIILRYKDNLDLSGGAKEV-----YDGVLEND---KNQFKLTSS 53  
Db 35 SDKMPSLIVNELDRELNRWK-----QQYPSKEELIKELKYDANNENSAVLKNE--LTSK 87  
QY 54 ANSKIRVTQNON---IIFNSVFL-----DFSV--SEWIRPKYKNDGIONYTHNE-----YT 100  
Db 88 LKFKLDYQDSNEFLYLNKSKQMIEIHDYKKEQFEDIPLEDSVYKSIANNEDTEYI 147  
QY 101 IINCMKNSGKISIRGNRIITLIDINGKTSVFFE-----YINREDISE--YINRW--FFV 154  
Db 148 IMKRAPEFNEEDKLNIS-----IKVDGKFELOFHRIAYDSKKEKMYLQYRIKIFM 199  
QY 155 TITNLLNNAKIYINGKLESNTDIDKIDREVIANGIEIIFKLDGIDIRTOFTWKMYFSIENT- 213  
Db 200 LIEKNL-----EYISWGPHLFWNES 219  
QY 214 --ELSQSNIERYKIOSYSLKDFWGNPLMYNKYMFNAGNKNYSI--KLKQDSPYGE 269  
Db 220 IGEVNTINIITDKMLIALASGEMYTANKIKENN-----SASKNKTEILSNRLDKLFE 274  
QY 270 ILRPSKYNQNSKY-----INRYDLYG-----EKFIIRK-----SNSQSINDD 308  
Db 275 IIEHFQNSLQKEPKISTPFPKSGEILGVTYTYLLYKQKLIIEKRLKESLLKLTSTFDLED 334  
QY 309 IVRKEDYIYLDFFNLQAEWRV-----YTYFYKKEEKLFLAPISDSDELYNTIQIKEYDE 364  
Db 335 IKGKK-----FTLIQEKVNTIIFQKISYTOQCYVQVKSSD-----YERKLQDDEFLK 383  
QY 365 Q--PTYSQOLLFPKDBESDEIGLIGIHRFYESGIVFEE 401  
Db 384 KFNPEYVITILKASFNTEPIGL-----ENTAFEE 414  
RESULT 3  
US-10-092-411A-2993

; Sequence 2993, Application US/10092411A  
; GENERAL INFORMATION:  
; APPLICANT: Lynn Doucette-Stamm et al  
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS  
; TITLE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS  
; FILE REFERENCE: 032796-101  
; CURRENT APPLICATION NUMBER: US/10/092,411A  
; CURRENT FILING DATE: 2002-03-07  
; PRIOR APPLICATION NUMBER: US 09/134,001  
; PRIOR FILING DATE: 1998-08-13  
; PRIOR APPLICATION NUMBER: US 60/064,964  
; PRIOR FILING DATE: 1997-11-08  
; PRIOR APPLICATION NUMBER: US 60/055,779  
; PRIOR FILING DATE: 1997-08-14  
; NUMBER OF SEQ ID NOS: 5676  
; SEQ ID NO 2993  
; LENGTH: 912  
; TYPE: PRT  
; ORGANISM: Staphylococcus epidermidis  
US-10-092-411A-2993  
Query Match 4.9%; Score 115.5; DB 6; Length 912;  
Best Local Similarity 19.8%; Pred. No. 2.1;  
Matches 102; Conservative 78; Mismatches 170; Indels 164; Gaps 26;  
QY 1 MANKYSEILNNIILRYKDNLDLSGGAKEVYDGVLENDKNOFKLTSSANSKIRV 60  
Db 439 LIDKYNN-----NLAYKHPNREIHSFGDKYLYE---NEQSIMSIIKS---IKL 482  
QY 61 TONONTIFNSVFLDFSVFWRIPKYNKDGIQNYTHNEVTIINCNNKNSGKISIR--GN 118  
Db 483 LSNEVEGYS---NSVEFW-----LNNYTSIDCKEKK---EILLRFSN 521  
QY 119 RIWTLIDINGKTSVFFEYNEIREDISEYINRWFF---VTITNLLNNAKIYINGKLE--SN 174  
Db 522 SKISMVYGAAGTGKST-----LINHCNFFYDKDVIVIANINTAVDNKRRKIKLSN 572  
QY 175 TDKIDREVIANGIE-----IIFKLDGDI---DRTOFIWKYFSIFNIELSQSNIETERYKI 226  
Db 573 IKTSITSKLYNDKKEKYDLLIIDEAGTVSNKMDNKLLENKQFELLII-----VGDNYQI 626  
QY 227 QS-----YSEYLKDFWGNPLMYNKYMFNAGNKNYSIKLK-----KQSPVGEIITRSKY- 276  
Db 627 ESIDFGNWFELAKDLVLSKNII--NELTDMYRTKNDLLYFKWSVREKKNLNLNINMKNYS 685  
QY 277 -----NQNSK-----YINRYDLY--ICEKFIIRKSNQSINDDIVRKEDIYLDFFN 322  
Db 686 TRDESIFNEFKKDEILCLNYDGYGINN---INRLQANNKNDVSI----- 730  
QY 323 LNOEWRVYTYFYKKEEKLFLAPISDSDELYNT-----IQIKEYDEQTYSCOL----- 372  
Db 731 ---WGV---KEYKVGDPILFNETKNYSIPLENNLKSGSIIIEHVFEYILEDFLEINKVIN 783  
QY 373 -----LFKKDEESTDEI-----GLIGIHR----- 391  
Db 784 ELDIISLEIDLSSSENSSVIRIRVEKSDGLNDNDSDSDSIVFPQVYASISIHKAQGLE 843  
QY 392 FYESGIVFVEYKDYFCISKWYLKVKRKPYNLKL 425  
Db 844 FNSVKIVISDDLDLDEQITNNIIFYTAIRARENLKI 877  
RESULT 4  
US-10-092-411A-3080  
; Sequence 3080, Application US/10092411A  
; GENERAL INFORMATION:  
; APPLICANT: Lynn Doucette-Stamm et al  
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS  
; TITLE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS  
; FILE REFERENCE: 032796-101  
; CURRENT APPLICATION NUMBER: US/10/092,411A  
; CURRENT FILING DATE: 2002-03-07  
; PRIOR APPLICATION NUMBER: US 09/134,001

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; PRIOR FILING DATE: 1998-08-13
; PRIOR APPLICATION NUMBER: US 60/064,964
; PRIOR FILING DATE: 1997-11-08
; PRIOR APPLICATION NUMBER: US 60/055,779
; PRIOR FILING DATE: 1997-08-14
; NUMBER OF SEQ ID NOS: 5676
; SEQ ID NO 5080
; LENGTH: 3696
; TYPE: PRT
; ORGANISM: Staphylococcus epidermidis
US-10-092-411a-5080

Query Match      4.9%; Score 115.5; DB 6; Length 3696;
Best Local Similarity 20.2%; Pred. No. 9.5;
Matches 99; Conservative 81; Mismatches 158; Indels 151; Gaps 27;

2 ANKYNSEILNIIILNRYKDNLDLSDGAKVEYDGV-----LNDKNQ-----FKLTSS 53
Db 162 NEKERDKINKILFNHQRNIVIRKAEISHPFTFWGKYIILIPSYFKSINDKKLYI 221
QY 49 KITSSANSKIRVTQNONIIFNSVFLDFSVFWIRIPRYKNDGIQIYHNEYTIINCMKN 108
Db 222 ILHEVAHAKNRDTHL-LIFHFISAMSYNPLIQIVRK-----MIHND----- 264
QY 109 SOWKISIRGNRIIWLIDINGTKSVFEYNIREDISEYNRWEFVT---ITNNLNNAKI 165
Db 265 -----EVPADRFV-----LNNINNEFKSY--AEAIMDSVLKTSFFKNILSHSPNGKKS 312
QY 166 YINGKL-----ESNTDIKDIREVIANGIEIFKLDGIDIDTOFIWMKYFSIFNTELSOSNIE 221
Db 313 LLKRRLINIKEGN--LKQSKLILIFICIFETFTMI-QSQFL-----MGQSLTD 359
QY 222 ERYKTSQYSEY-----LQDFWGNP---LMYN---KEYMFNAGNKNKYIKLKDPSVGEI 270
Db 360 YNYKPLQSDYOILDESKNFGSGFVMSMKDKYIYN-----EKES----- 404
QY 271 LTRSYNONSXYINRYDIYIGEFTIIRKNSQSINDIVRKEDYIYLDFFNLNQE--- 326
Db 405 --RKYPSPSTYKIYALFGLDRHIIISDKNSRMSWN-----HNNHYPDSNNKDDDLNTA 456
QY 327 -----WRVYIKFKKEEKLFLAPISDS-----DELYN 355
Db 457 IONSYNW-----YFERISNQLSKNYTSDQLKQLNYGNKNLGSYKAYWLEDLSKISLEQ 510
QY 356 TQIKXEYDEQPTY-----SCQLLFKDE--ESTDEIGLIGHRFYFESG-----IVF 399
Db 511 VIVLKNMEQNHFESKNEKKQLSSLLIRKKNENYELYGKTGTGVNGKYNNGWFGVYIT 570
QY 400 EYKDYFCISKWYLAKEVRKPYNLK 424
Db 571 NHDKYIF---STHLSDEKASGENAK 592

RESULT 6
US-10-092-411a-2890
; Sequence 2890, Application US/10092411a
; GENERAL INFORMATION:
; APPLICANT: Lynn Doucette-Stamm et al
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCC
; TITLE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 032796-101
; CURRENT APPLICATION NUMBER: US/10/092,411a
; CURRENT FILING DATE: 2002-03-07
; PRIOR APPLICATION NUMBER: US 09/134,001
; PRIOR FILING DATE: 1998-08-13
; PRIOR APPLICATION NUMBER: US 60/064,964
; PRIOR FILING DATE: 1997-11-08
; PRIOR APPLICATION NUMBER: US 60/055,779
; PRIOR FILING DATE: 1997-08-14
; NUMBER OF SEQ ID NOS: 5676
; SEQ ID NO 2890
; LENGTH: 321
; TYPE: PRT
; ORGANISM: Staphylococcus epidermidis
US-10-092-411a-2890

Query Match      4.7%; Score 111; DB 6; Length 321;
Best Local Similarity 19.7%; Pred. No. 1.2;
Matches 71; Conservative 72; Mismatches 120; Indels 98; Gaps 20;

QY 50 LTRSSANSKIRV-----TQNNIIFNSVFLDFSVS-----FWIRI 83
; TYPE: PRT
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Db 1 LVSSIDTKRRIIMKKSVRLYNMIEYCENNRNFKLNDLMEFNISRSTALRDKIEALGV 60  
QY 84 PKYKNDGIONYTHNYTTINCMKNSGKWSIRGNR---IITWILDINGTKSVFFPEYNI 140  
Db 61 PLYSNP---RNGYTTIG---NRDQKIAITDEELKALVFTLUSSISVSNLPP----- 108  
QY 141 REDISEYINRWFVITNNLNNAKIYINGKLESNTDIKDIRVIANGEIIFKLDGDIRT 200  
Db 109 QTEYQELKKLY---NNSNK-----KELINQYNDLFQYFNE-DKY 144  
QY 201 QITWKKYFIFWTELQSNIERYKIQSYSE-YLKD-FWGNPLMY-NKEYYMFNAGKNS 257  
Db 145 QF---KSYKLEN-ETIRLIIENKSEFETCYSONYKEQYKIGIMYKHOYFVYVANTESK 200  
QY 258 YIKKKDSVPGSILRSKYNSQNSKYNIRDLVIGKFIIR-----KSNOSINDDI 309  
Db 201 LVNLLNISIKELYENG-TQBCNDITWQNF---QOFVKNETAIDILIRSNVGLN-I 254  
QY 310 VKREDYIYDFNLQWNRVYTYKKEEKLFLA-----PISDSDELYNTIQI 359  
Db 255 LK--GYLWSDYMIENIDETYLFSKVNAKDIDETAKLIVTGGVNVKVPNSLKNVAVY 312  
QY 360 K 360  
Db 313 E 313

RESULT 7  
US-10-085-198-22  
; Sequence 22, Application US/10085198  
; GENERAL INFORMATION:  
; APPLICANT: Alsobrook et al.  
; TITLE OF INVENTION: Proteins and Nucleic Acids Encoding Same  
; FILE REFERENCE: 21402-279  
; CURRENT APPLICATION NUMBER: US/10/085,198  
; PRIOR FILING DATE: 2002-02-25  
; PRIOR FILING DATE: 2001-02-25  
; PRIOR FILING DATE: 2001-03-16  
; PRIOR FILING DATE: 2001-03-16  
; PRIOR FILING DATE: 2001-08-13  
; PRIOR FILING DATE: 2001-08-13  
; PRIOR FILING DATE: 2001-08-16  
; PRIOR FILING DATE: 2001-08-16  
; PRIOR FILING DATE: 2001-02-27  
; PRIOR FILING DATE: 2001-02-27  
; PRIOR FILING DATE: 2001-03-20  
; PRIOR FILING DATE: 2001-03-20  
; PRIOR FILING DATE: 2001-04-21  
; PRIOR FILING DATE: 2001-04-21  
; PRIOR FILING DATE: 2001-06-20  
; PRIOR FILING DATE: 2001-06-20  
; PRIOR FILING DATE: 2001-08-29  
; PRIOR FILING DATE: 2001-08-29  
; PRIOR FILING DATE: 2001-02-28  
; Remaining Prior Application data removed - See File Wrapper or PALM.  
; NUMBER OF SEQ ID NOS: 653  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 22  
; LENGTH: 4544  
; TYPE: PRT  
; ORGANISM: Homo sapiens  
US-10-085-198-22

Query Match 4.7%; Score 110; DB 6; Length 4544;  
Best Local Similarity 26.4%; Pred. No. 23;  
Matches 51; Conservative 39; Mismatches 61; Indels 42; Gaps 11;  
QY 213 TELSOSNIEB----RKIQSYSEYKDFWGNP-----LMNKEYYMFNAGKNSYIKKKD 264  
Db 598 TAYSA:DIDELELVKYIISGNE-LGFFYLPDPSGVQLKKS--LTNSGIKNGNFAIRIT 654

QY 265 SPVGEILRSKY-----NONGSKYINRDLTY-----GBKFIIRKKSQNSINDDIVRK 312  
Db 655 ATDGNLADPMSINISVHLGVSKSFSCTRYVAQKLAELKLIKAKANGK-----LNL 708  
QY 313 EDYIYDFNLQWNRVYTYKKEEKLFLAPISDSDEL---YNTIQIKEYDEQPTYS 369  
Db 709 EDG-FLDFYSINRQ-----PYF-----DKSPSDVAVKEDLPVGANILKIKAYDADSGFN 758  
QY 370 COLLEFKKDEESTD 382  
Db 759 GKVLFTISDGNTD 771  
RESULT 8  
US-10-092-411A-4348  
; Sequence 4348, Application US/10092411A  
; GENERAL INFORMATION:  
; APPLICANT: Lynn Doucette-Stamm et al  
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCC  
; FILE REFERENCE: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS  
; FILE REFERENCE: 032796-101  
; CURRENT APPLICATION NUMBER: US/10/092,411A  
; CURRENT FILING DATE: 2002-03-07  
; PRIOR APPLICATION NUMBER: US 09/134,001  
; PRIOR FILING DATE: 1998-08-13  
; PRIOR APPLICATION NUMBER: US 60/064,964  
; PRIOR FILING DATE: 1997-11-08  
; PRIOR APPLICATION NUMBER: US 60/055,779  
; PRIOR FILING DATE: 1997-08-14  
; NUMBER OF SEQ ID NOS: 5676  
; SEQ ID NO 4348  
; LENGTH: 518  
; TYPE: PRT  
; ORGANISM: Staphylococcus epidermidis  
US-10-092-411A-4348  
Query Match 4.7%; Score 109.5; DB 6; Length 518;  
Best Local Similarity 18.7%; Pred. No. 2.4;  
Matches 98; Conservative 66; Mismatches 165; Indels 195; Gaps 23;  
QY 7 SEILNNILNRYKDNLLIDISGYGAKVEYDGVDELNDKNOFKLTSSANSKIRVTQONI 66  
Db 61 SENIQTLSNIGFKDDEVILWYQYFTDVKIAPTYYDD---LISELGNVTRKEQNGV 117  
QY 67 IFNSVFLDPSVFWIRIPKYNKNDGIONYTHNYTTINCMKNSGKWSIRGNRIITWFLID 126  
Db 118 -----LRLYNNQQTFTVYCYLKNANEHYVDRAEFV----- 147  
QY 127 INKTKSVFFENIREDISYINRWFFVTIINNNAKIYI-----NGKLESNTDIKD- 179  
Db 148 VNGML-----IRKDFYSYV-RTFSEYAPFDNKAKIYMRQFYNNENGSIAYREYIDED 198  
QY 180 -----IREVIANGEIIFKLD----- 194  
Db 199 EHVFFVDDARLYSKOALVAYFIRQLRLNSEDIIILIDRATDVGOALLENKSSKGVVVVHA 258  
QY 195 -----GDIDRTQFIWKKY-----FSIFNTELSQNSNIERYKIQSYSEYKLDWF 237  
Db 259 EHFSECATDGTHTILWNYYEYOFENAAQIDFFITATDLQRTLSEQFK-----QYKND- 312  
QY 238 GNPLMYNKEYYMFNAGKNSYIKKKDSVPGEIILTRSKYNSQNSKYNIRDLVIGKFIIR 297  
Db 313 -----PAIRTPVGSIESLQYPEKERKPYSLMTASRL-ANEKHVD-----WIVEA-VIK 359  
QY 298 RKSNSOSINDDIV-----RKEDIYIL-DFNLEQWNRVYTYKKEE 340  
Db 360 AKHQLPQLSFIDYIGOGEEQEKIKNIITKHRAEDYIQIKGHNRLTIYQY----- 409  
QY 341 KLFLAPISDSDELYNTIQ-----IKEYDEQPTYSQQLFKKDEE 379  
Db 410 ELFLA-ASOSEFGJLMEAVSGGLMGIDFVNGYSPFIRHH--QNCYLLPIDF--EQA 464  
QY 380 STDEIGLIGIH---RFYBSG-----IVFEYKYDYFCISKW 411



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Query Match 4.4%; Score 104.5; DB 6; Length 406;  
 Best Local Similarity 21.4%; Pred No. 3.4;  
 Matches 60; Conservative 43; Mismatches 87; Indels 91; Gaps 15;

QY 151 WFFVTNNNAKIYINGKLENTDIDIREVANGIEI-----IFK 192  
 DB 22 WVFPTVTEI-----TSLATENIDELNADVALVNFYADRCRFSOMLHPIFE 69  
 QY 193 LDGDIRTQFIWMKYSIFNTELSQ-SNIEERYKIOSYSEYKLDKDFGNPLAVNKEYEYMFEN 251  
 DB 70 EASDVIREFPNEQVYFARVDCQHSDAQRYRSKYPT-LKLF-RNGMMKREY----- 123  
 QY 252 AGKN-----SYIKLKDSVGEI-----LTRSK-----YNQNSKIYINRDIYICEK 293  
 DB 124 RQSVKALADYIRQOKSDPIQIRDLAEITLDRSKNIIGYFEQKDSNYR----- 176  
 QY 294 FIIRKSNOSINDIVRKDYIYLDFFNLNWEWRYT-----YK-YFKKEEKLFLAPI 347  
 DB 177 -VPERVAN-----ILHDDCAFLSAFGDVSKPERYSGDNIYKPPGHSAPDAVYLGM 227  
 QY 348 SDSDELNTWTOIKEYDEQPTYSK-----OLLFKKDEESTDE 383  
 DB 228 TNFDVTYNWIOCK-----CVPLREITFENGEEELTEE 259

RESULT 14  
 US-10-092-411A-3015  
 Sequence 3015; Application US/10092411A  
 GENERAL INFORMATION:  
 APPLICANT: Lynn Doucette-Stamm et al  
 TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS  
 TITLE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS  
 FILE REFERENCE: 032796-101  
 CURRENT FILING DATE: 2002-03-07  
 PRIOR FILING DATE: 1998-08-13  
 PRIOR APPLICATION NUMBER: US 09/134,001  
 PRIOR FILING DATE: 1997-11-08  
 PRIOR APPLICATION NUMBER: US 60/064,964  
 PRIOR FILING DATE: 1997-08-14  
 PRIOR APPLICATION NUMBER: US 60/055,779  
 NUMBER OF SEQ ID NOS: 5676  
 SEQ ID NO 3015  
 LENGTH: 703  
 TYPE: PRT  
 ORGANISM: Staphylococcus epidermidis  
 US-10-092-411A-3015

Query Match 4.4%; Score 103.5; DB 6; Length 703;  
 Best Local Similarity 17.9%; Pred No. 6.8;  
 Matches 81; Conservative 76; Mismatches 145; Indels 151; Gaps 21;

15 LNLRYKDNLDLSGYGAKVEYDGVDELNDKQFKLTSSANSKIRVTQNLNIFNSVFLD 74  
 DB 190 LNMFKD-----YFTSLKVIDSIK-----RLSSDSINAISSQSG--FSS----- 228  
 QY 75 FSVFWIRIPKYNKDGIQNYHNEVTIINCMNNSGWSISIRGNRIIWLIDINGTKSV 134  
 DB 229 -----HNETI--NQFNLYG--CSPQYRTIISKLD---SLPSI 260  
 QY 135 FFEVNIREDISEVINRWFVTTNNNAKIYINGKLESNTDIDIREV-----IANGEI 189  
 DB 261 SFS-----DTSQVID-----LINOFE-----FSDHLATEETERDINEFYDQOTRNSKA 306  
 QY 190 IFKLDGDIRTQFIWMKYSIFNTELSQSNIEERYKIOSYSEYKLDKDFGNPLAVNKEYEYMFEN 251  
 DB 307 FIRQFNELFQVENEYINIDFTSLPQAVI-----FINDITDISTREVNENLNR 358  
 QY 245 -KEYMFENAGNKNYSIKLKDSVGEIL-----TRSKYNQNSKIYINRDIYICEKFIIR 298  
 DB 359 FEKLEFNGLAMRLSTNEFBSIKIILLFLNSHODYKMKMKWY-----KFLV 409  
 QY 299 KSNQSQIND-----DIVRK--EDVIYLDFF 321

DB 410 EFKNSVNDIHLCHLKIKNNKNAIRYSITVEGLHQNSSIDRIYDMKRLNFDYFIDIE 469  
 QY 322 NUNOEWRYTYK-----YFKKEEKLFLAPISDSDELYNTIQIK--EYDEQPTYSQ 371  
 DB 470 NLETKNSLITRKSYLSHSTHFENYKOFILDSGIPSTKFYNNLSLKCPKYNNGTYPLO 529  
 QY 372 LLEFKKDEESTDEIGLIGHRFYESGIVFEYK 404  
 DB 530 L-----SDLVCHLVALMR-YGGVSVYQLIED 534

RESULT 15  
 US-10-092-411A-2972  
 Sequence 2972; Application US/10092411A  
 GENERAL INFORMATION:  
 APPLICANT: Lynn Doucette-Stamm et al  
 TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO STAPHYLOCOCCUS  
 TITLE OF INVENTION: EPIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS  
 FILE REFERENCE: 032796-101  
 CURRENT APPLICATION NUMBER: US/10/092,411A  
 CURRENT FILING DATE: 2002-03-07  
 PRIOR APPLICATION NUMBER: US 09/134,001  
 PRIOR FILING DATE: 1998-08-13  
 PRIOR APPLICATION NUMBER: US 60/064,964  
 PRIOR FILING DATE: 1997-11-08  
 PRIOR APPLICATION NUMBER: US 60/055,779  
 PRIOR FILING DATE: 1997-08-14  
 NUMBER OF SEQ ID NOS: 5676  
 SEQ ID NO 2972  
 LENGTH: 570  
 TYPE: PRT  
 ORGANISM: Staphylococcus epidermidis  
 US-10-092-411A-2972

Query Match 4.4%; Score 102.5; DB 6; Length 570;  
 Best Local Similarity 19.8%; Pred No. 6.1;  
 Matches 91; Conservative 71; Mismatches 138; Indels 165; Gaps 25;

QY 2 ANKYNSEILNIIILRYKDNLDLSGYGAKVEYDGV--VE--LND-----KNQFK 49  
 DB 39 ATSYHPKMWLAVAL-----YATQSVFSGRKIEKMLNDSIRMMWLSQNG-K 83  
 QY 50 LTSSANSKIRVTQNLNIFNSVFLDPSVFWIRIPKYNKDGIQNYHNEVTIINCMKNNS 109  
 DB 84 PSYKTINQFRVNPVDALLESPIQF-----YSQVKNLIDDKAIFD----- 127  
 QY 110 GWKISIRGNR--IIWTL-----IDINGTKSVFFEY-----NIREDISYINRWFV 154  
 DB 128 GFKIEANANRYTFVKKSIQNHESKMNEDSKALYHELVTNKIPIEKEDHD----- 178  
 QY 155 TITNNLNAKIYINGKLESNTDIDIREVANGIEIIFKLDGDIRTQFIWMKYSIFNTE 214  
 DB 179 ---NELTKEEIDLTS--HLDKEIEDLNQHINNEK-----TK 211  
 QY 215 LSQSNIERIERYKIOSYSEYKLDKDFGNPLAVNKEYMFNAGNKNYSIKLKDSV----- 267  
 DB 212 TRKQLRLKRTKIKYKKQINDYFER--KYRVEEQKSLADRNYSYKTDYDAFFMRMKEDH 269  
 QY 268 ---GEILTRSKYN---QNSKIYINRDL-----ICE-----KFLIR-- 297  
 DB 270 MKNQOL--KPGYNQIATNSQFVLSVYQNPQDTTMTIFFLNSIQETVGHLPYIVADA 327  
 QY 298 ---RKSNSQINDIVRKEDYIYLDFFNLNQEWRVYTYKYFKKEEKLFLAPISDSDELY 354  
 DB 328 GYGSNSYKAIIDDFNRT-----LITYGMFKDKTKKY-----KSDIF 366  
 QY 355 NTIQIKEYDE-QPTYSK-----QLLFXKDEESTDEIGLIGHRFYE 394  
 DB 367 NT-QNNWYDEINDEFICPNKRLGFKRYAYRHOKYGYKRDFFLYE 410

Search completed: November 1, 2002, 08:23:29

Job time : 14 secs

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